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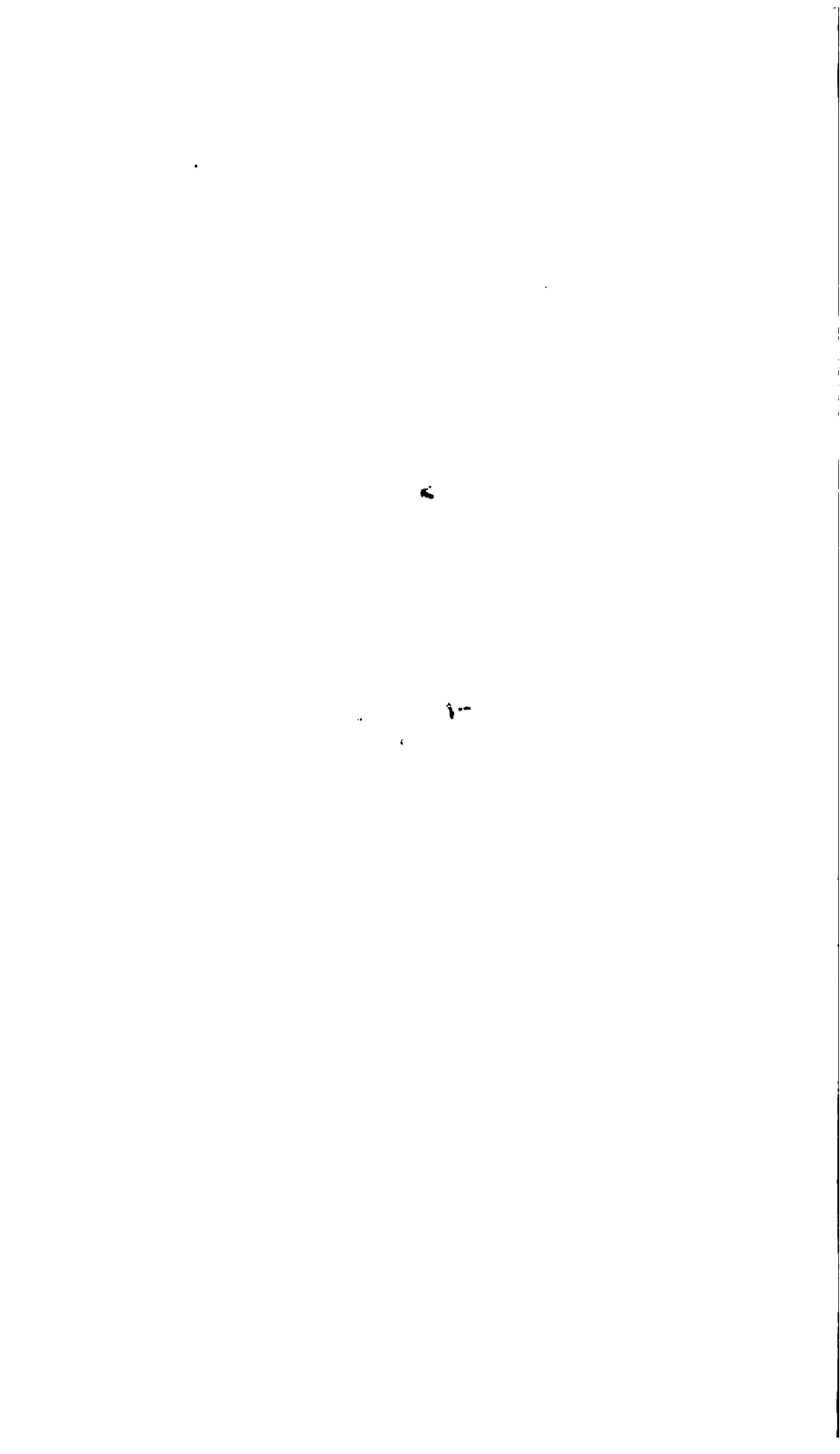


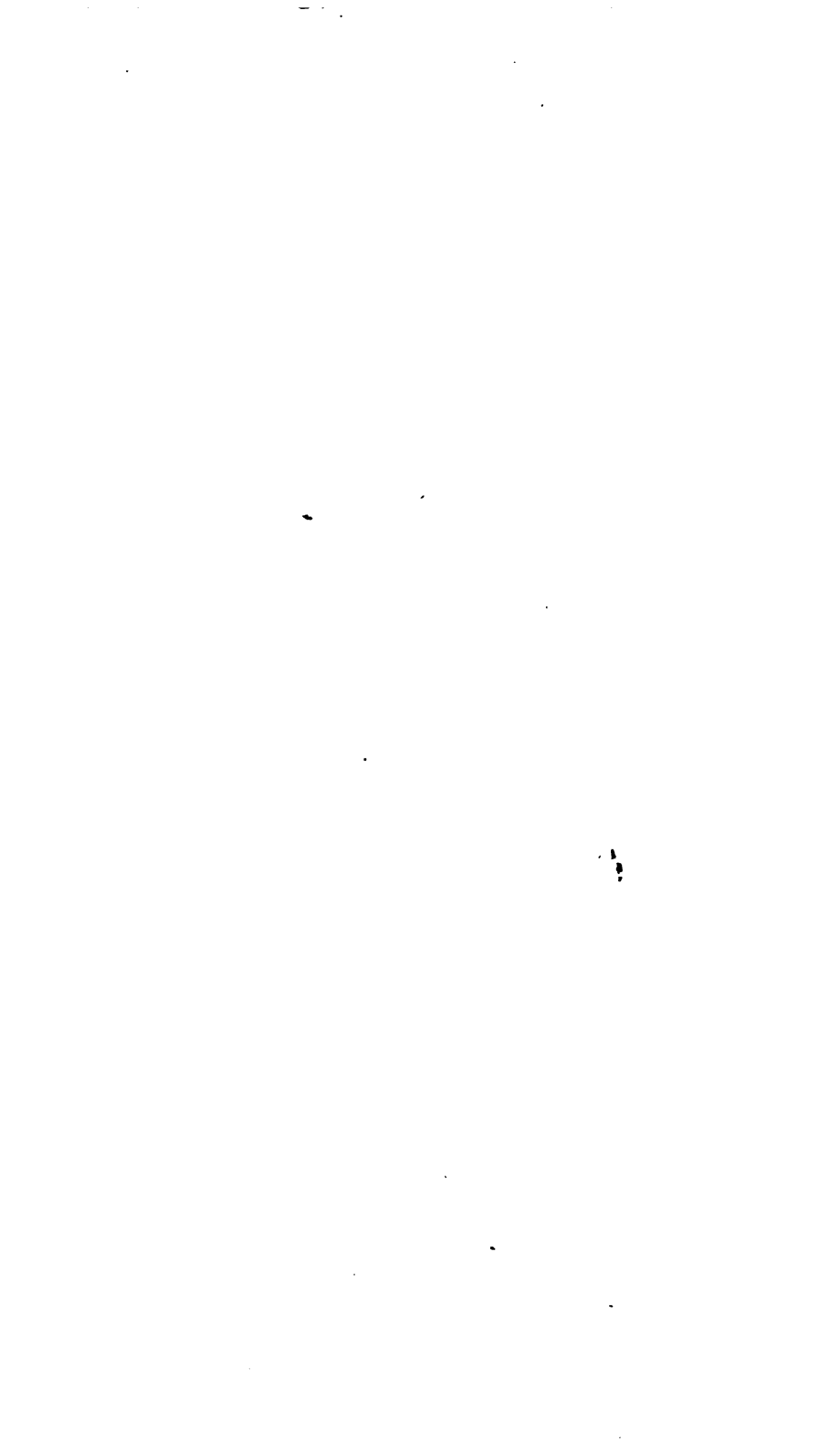
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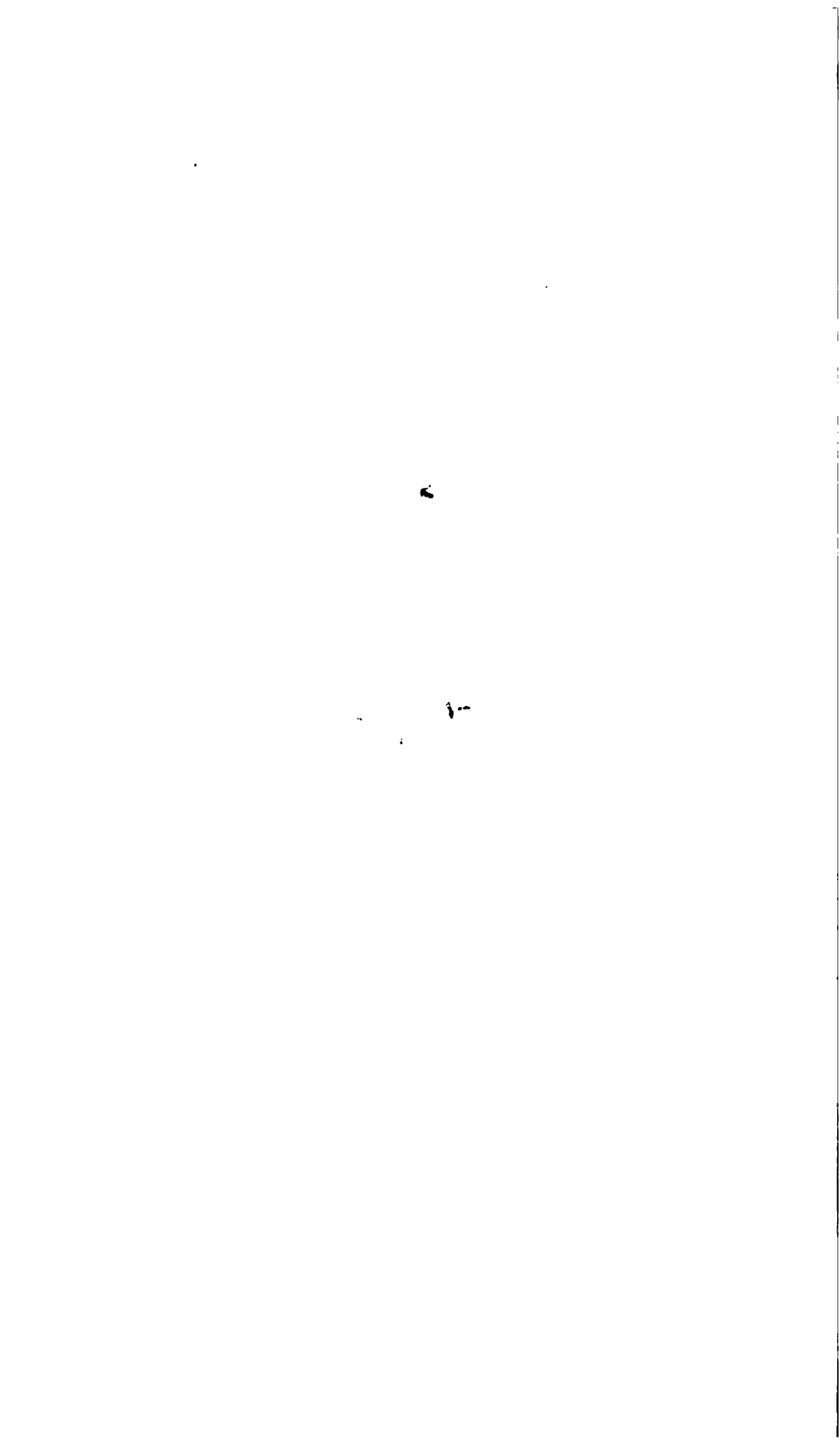
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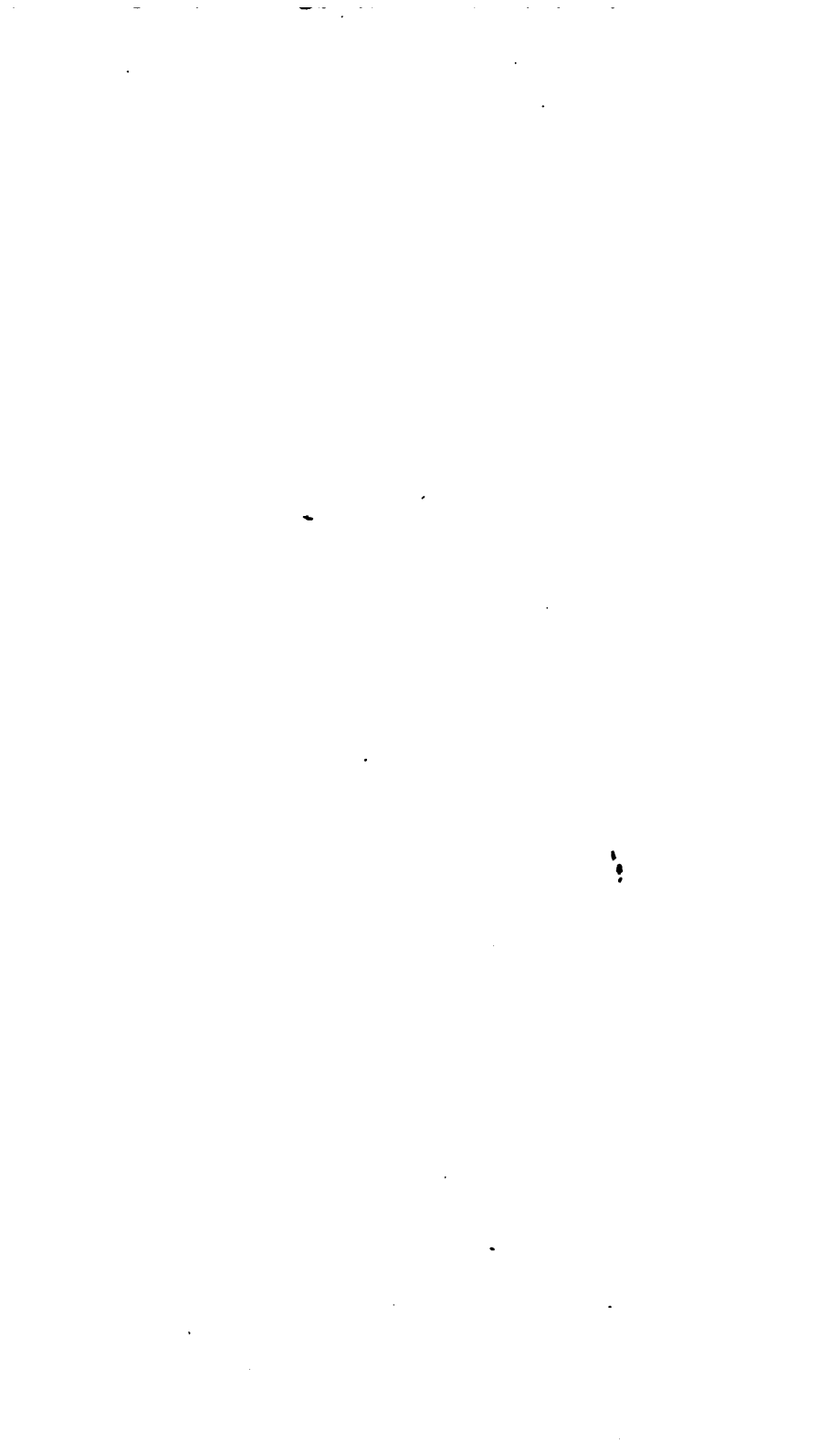


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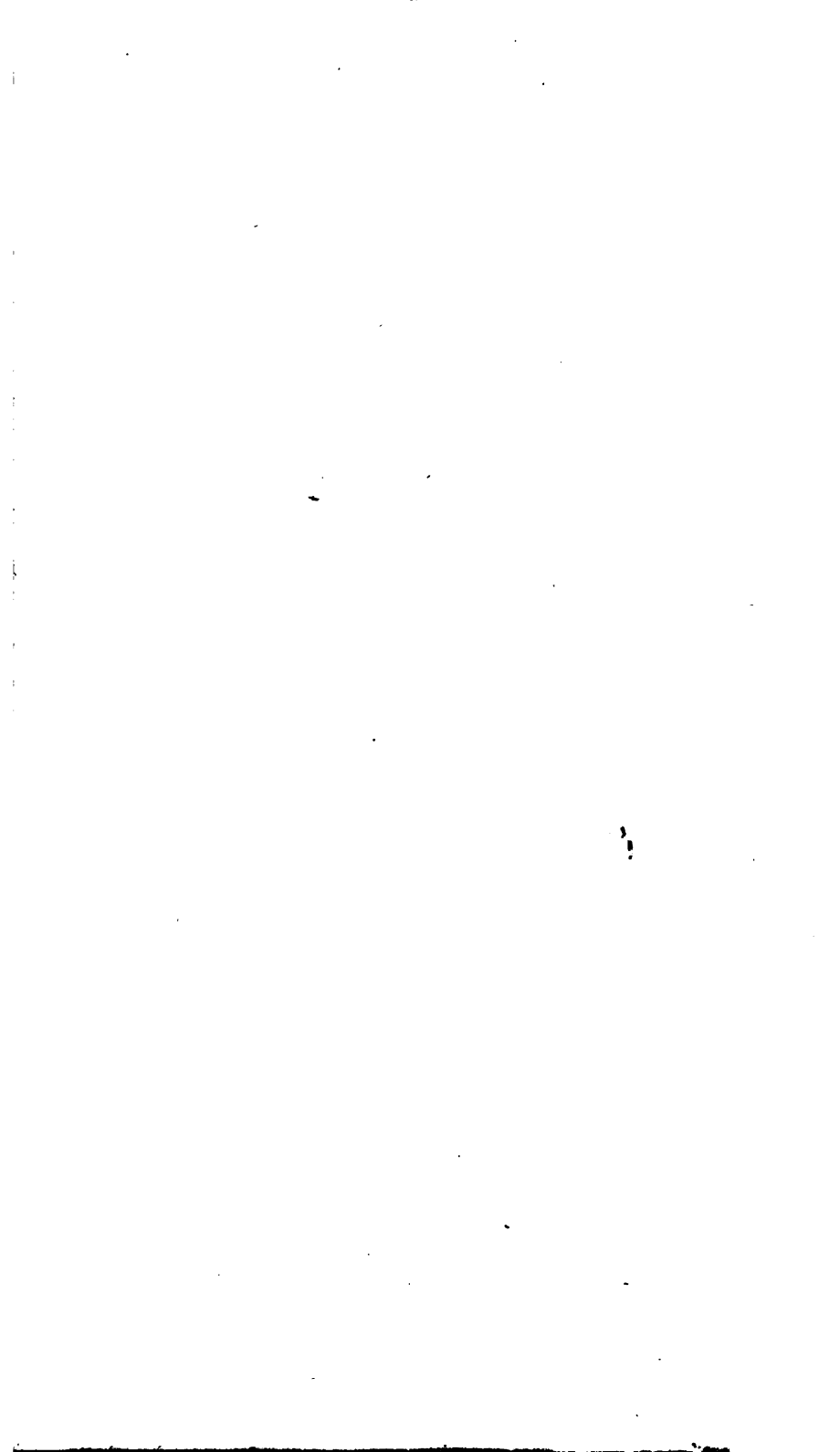


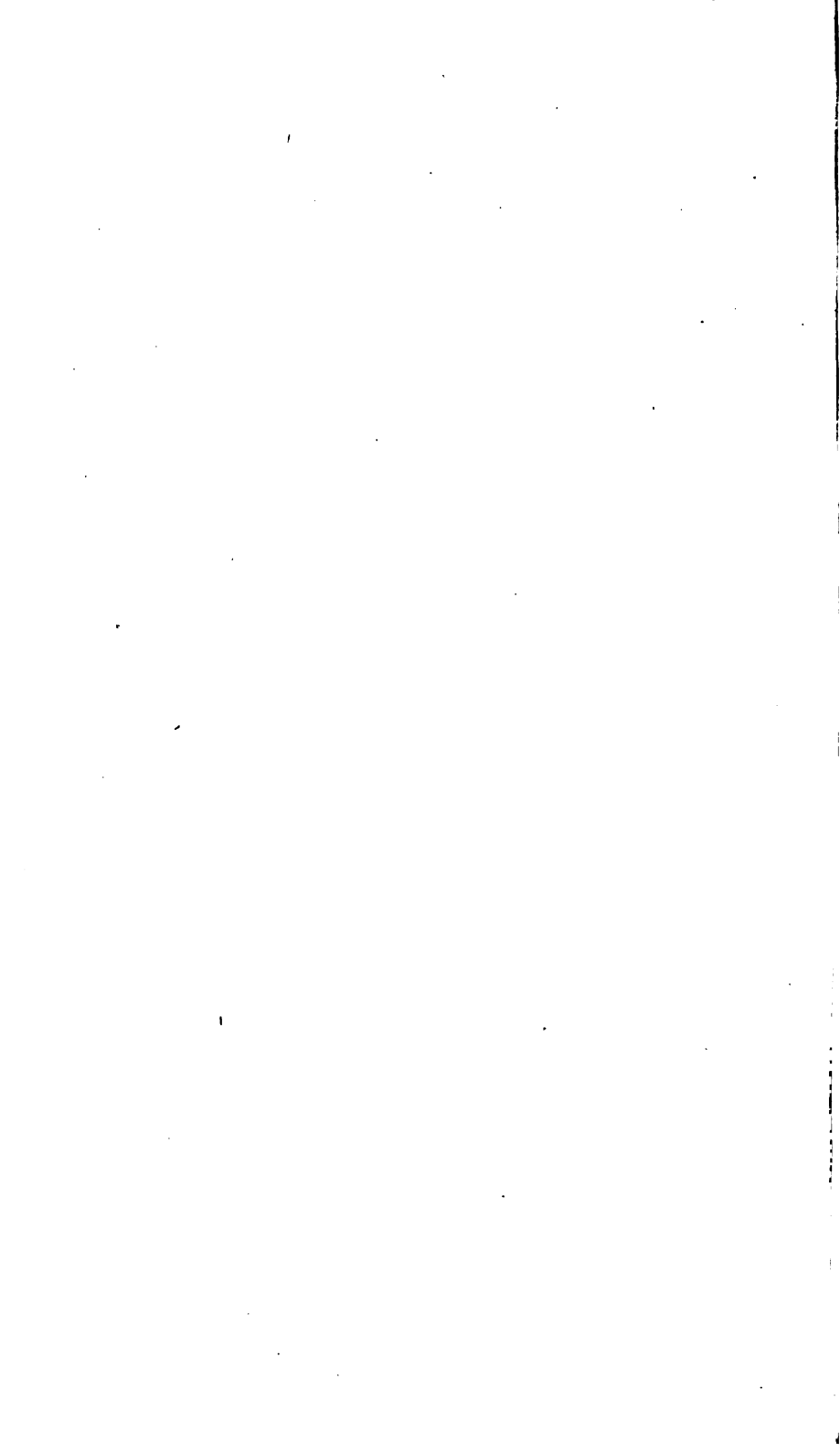




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THE
HISTORY OF MEXICO,

FROM THE

Spanish Conquest

TO THE

P R E S E N T Æ R A ;

CONTAINING

A condensed and connected general View of the Manners, Customs, Religion, Commerce, Soil, and Agriculture—Animal, Vegetable, and Mineral Productions—A concise Political and Statistical Review of the Changes effected in that Country, with its present Form of Government, &c. &c.—Also, Observations, Speculative and Practical, as to the best Means of Working the MEXICAN MINES, by a Combination of British Talent, Capital, and Machinery.

By **NICHOLAS MILL, Esq.**

“ Mixtaque cum veris passim commenta vagantur,

“ Millia rumorum: Confusaque verba volutant,”

OVID. METAM. lib. XII.

LONDON:
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1824.

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DEDICATION.

TO

DAVID BARCLAY, ESQ.

CHAIRMAN OF THE ANGLO-MEXICAN MINING ASSOCIATION.

SIR,

THE intense interest which has been excited in the public mind towards that beautiful and fertile, but hitherto neglected, portion of the globe, Mexico, demands that some authentic history, in a convenient form, should be laid before the public; calculated to give it a just and faithful insight into the nature of the country, its inhabitants, government, and resources.

The want of any publication of this nature, which does at once embrace all authentic knowledge of this nation (now only to be found either in elaborate scientific works, not suited to the general reader ; or articles, in detached fragments, inserted in periodical journals) has led me to believe that such a publication as here alluded to, would, at this moment, prove both seasonable and acceptable.

Having been so fortunate as to procure access to persons not only competent, but willing, to furnish me with information and documents, of the most important kind, hitherto unpublished, I have availed myself of the opportunity thus afforded me of preparing a History of Mexico ; presenting, I hope, a condensed and general view of

its manners, customs, laws, commerce, religion, arts, sciences, and manufactures; climate, soil, and agriculture; animal, vegetable, and mineral productions; embracing, at the same time, a concise, political, and statistical review of the changes lately effected in that interesting portion of the world; with a variety of desirable information relative to the present form of government, and the future independence and commercial security about to be established there; collected from the best and most recent authorities, as well as from the hitherto unpublished documents and opinions of individuals of distinction, immediately connected with the jurisprudence and commercial relations of that quarter of the globe; pointing out the advantages that must accrue to England, from an active and unrestricted intercourse therewith. Als

Observations, speculative and practical, as to the best means of working the mines, by a combination of British talent, capital, and machinery.

To no one, therefore, can such a production as I have attempted, be dedicated, with so much propriety, as to you, Sir, who have taken so prominent a part in forming, and have now the honour to preside over, an undertaking calculated, above all others, to draw forth the mineral resources of Mexico, to give employment to its numerous and unemployed population, to put in circulation, throughout that vast country, the capital which, from temporary causes, now lies buried in the bowels of the earth; to re-animate the spirit of commerce, and by supplying legitimate revenue to the state, to contribute so far to the consolida-

tion of its independence. Happy is it, when the honourable pursuits of commerce, under the direction of an intelligent and upright mind, run in a channel capable of producing such vast public benefit.

To the man of science it belongs not to be a calculator of commercial gain; but I am much mistaken if the measure of individual advantage, in this undertaking, be not fully commensurate (as it ought to be) with the other great objects to be accomplished by it.

I have the honour to be,

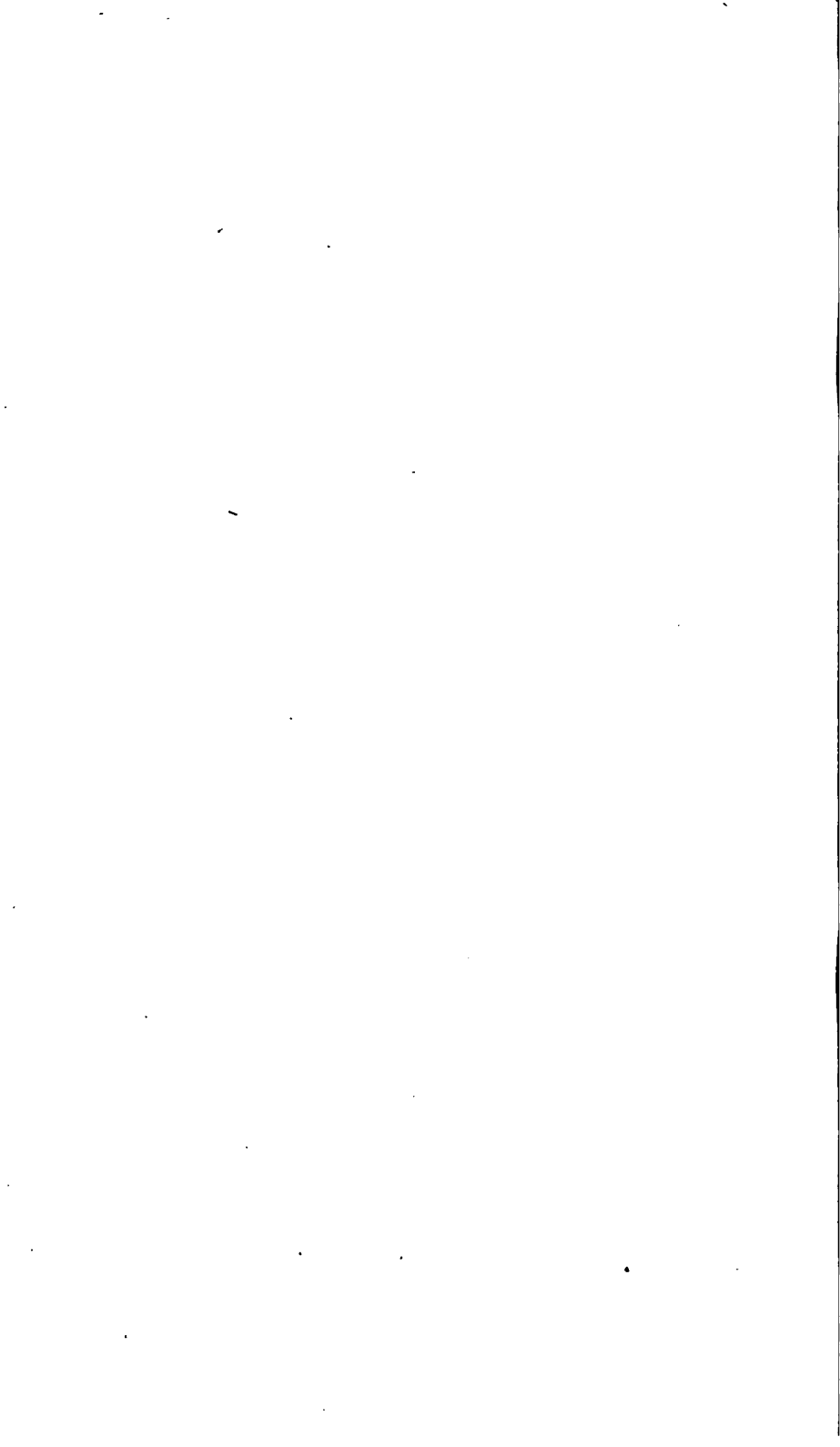
SIR,

Your most obedient humble servant,

NICHOLAS MILL.

CAMBERWELL,

April, 1824.



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HISTORY

OF

MEXICO.

INTRODUCTORY HISTORY.

THE discovery of South America was a remarkable era in the annals of the world, and has led to events which no human mind could have contemplated. The discoveries of Columbus would have been but little benefit to mankind, if the same chance which conducted him to the continent of the NEW WORLD, and the Phœnicians to the British shores, had been the only guide to the future intercourse of the two hemispheres.

It was the discovery of the compass alone, and its application to navigation, which made America valuable, and raised her to that importance in the scale of things, which she has since attained. It is unnecessary here to enter into the

conjectures and opinions which have been promulgated, respecting the antiquity of the Mexican nation; but it will be sufficient to observe, that, at the time of the conquest of the country of Mexico by Cortes, the Mexicans were the most enlightened nation of the American continent, and considerably advanced in certain arts and manufactures.

The country was divided into several kingdoms or commonwealths, and the inhabitants were an intrepid and warlike people, which they fully evinced in their frequent and determined repulses of the Spanish army, and it was only by superior skill and uncommon perseverance they were compelled to yield to the conqueror's sword.

From the cruel and exterminating policy exercised over them after the conquest, in destroying all their chiefs and nobles, who alone possessed the greatest knowledge and power, they have now dwindled into those lethargic habits, which are their principal characteristic.

They nevertheless possess, naturally, many of the qualities to form a great people; and it is to

be hoped, now a better order of things has arisen, that the shackles which have so long bound the enterprising Mexicans, will no longer cramp their energy; and that an enlightend policy will raise them to that rank amongst nations which, from their character and the situation of their country, they are entitled to maintain.

TERRITORIAL EXTENT.

The whole surface of Mexico is nearly 120,000 square leagues, of which about one half is in the Torrid Zone, and the other half in the Temperate Zone. The Eastern boundary of Mexico begins in the Bay of Honduras, and, including the Peninsula of Yucatan within its limits, crosses to the lake Terminos, and then due-south to Tonaloa, to the eastward of the port of Tehuantepec in the South Sea. This line divides it from the kingdom of Gautimala.

From lake Terminos, northward, the Gulf of Mexico forms the boundary to the river Mexicana in west longitude $92^{\circ} 30'$; from thence it is divided from Louisiana, by a line drawn through

the river Sabina, till it meets the Natchitoches, or Red River, in latitude 35° north; from that point, by a line to the sources of the Rio Grande, or, as it is more usually called, Rio Bravo del Norte, supposed to be in latitude 40° north; from thence its limits are an imaginary line, drawn to port San-Francisco, otherwise port Sir Francis Drake, in the Pacific Ocean, in latitude $37^{\circ} 30'$ north.

The Pacific Ocean is the Western boundary, from port San Francisco to Tonaloa in the Bay of Tehuantepec, where it joins Gautimala.

POPULATION, LANGUAGE, RELIGION, MANNERS, AND CUSTOMS.

The population of Mexico, including the whole of the kingdom, does not much exceed 10,000,000.

The people are divided into the following classes.

NATIVES OR INDIANS, WHITES, consisting of CRIOLLOS or CREOLES, born in the kingdom, and CHAPETONES or GACHUPINES, EUROPEANS, AFRICAN NEGROES, and CASTS of MIXED BLOOD. The descendants of WHITES and INDIANS are

called MESTIZOS. The descendants of WHITES and NEGROES are called MULATTOES, and the descendants of NEGROES and INDIANS are called ZAMBOS.

INDIANS.

The natives in their persons are swarthy, copper-coloured, with flat and smooth hair, small beard, long eye, with the corner directed towards the temples, prominent cheek-bones, thick lips, and an expression of gentleness in the mouth, strongly contrasted with a gloomy and severe look. They form two-fifths of the whole population, and speak different languages according to locality; the Mexican or Aztec language is the principal. They are never deformed in their persons, and are long-lived, but habitual drunkards: their subsistence chiefly consists of vegetable food. In their deportment they are grave and melancholic, when not under the influence of intoxication. This gravity is particularly remarkable in Indian children, who, at the age of four or five years, display much more intelligence than

white children of the same age. They throw a mysterious air over all their actions; the most violent passions are never painted in their features; and there is something frightful in seeing them pass all at once from absolute repose to a state of violent and unrestrained action. Religion is unknown to them, except the exterior form of worship; fond of whatever is connected with a prescribed order of ceremonies, they find in the Roman Catholic religion particular enjoyments. The festivals of the Romish church, the fireworks with which they are accompanied, the processions, mingled with dances and whimsical disguises, are a most fertile source of amusement for the lower Indians. The music and dancing of the natives partake of that want of gaiety which characterizes them. Their songs are terrific and melancholy. The women shew more vivacity than the men, but never take any share in the dance, and they remain present only to offer fermented liqueurs to the dancers, prepared by their own hands. The Indians have a particular taste for painting and for the art of

carving on wood or stone ; it is astonishing to see what they are able to execute with a bad knife on the hardest wood ; they are most fond of painting images and carving statues of Saints. The very great aptitude they display for mechanical arts, cannot fail to become highly valuable when manufactures are disseminated amongst them ; even at the time of the conquest by Cortes, they eminently excelled in the workmanship of gold and silver. Cortes, in his Letter to the Emperor Charles the Fifth, thus expresses himself, “ I was
“ presented with gold-plate and jewels, of such
“ precious workmanship, that, unwilling to allow
“ them to be melted, I set apart more than a
“ hundred thousand ducats worth of them to be
“ presented to your Imperial Highness. These
“ objects were of the greatest beauty, and I doubt
“ if any other prince on earth ever possessed any
“ thing similar to them. That your Highness
“ may not imagine I am advancing fables, I add,
“ that all which the earth and ocean produce, of
“ which King Montezuma could have any know-
“ ledge, he had caused to be imitated in gold,

“ silver, and precious stones, and feathers ; and
“ the whole in such great perfection, that one
“ could not help believing he saw the very ob-
“ jects represented.”

THE CACIQUES.

The Caciques are noble Indians, who have disdained alliance with the Spaniards, and who ought, by the Spanish laws, to participate in the privileges of the Castilian nobility. It is now difficult to distinguish, from their exterior, the Caciques from those Indians, whose ancestors, in the time of Montezuma II, constituted the lower cast of the Mexican nation. The noble, from the simplicity of his dress and mode of living, and from the aspect of misery which he loves to exhibit, is easily confounded with the tributary Indian. The latter shews to the former a respect, which indicates the distance prescribed by the ancient constitutions of Aztec hierarchy. The families who enjoy the hereditary rights of *Cas-ciasgo*, far from protecting the tributary cast of the natives, more frequently abuse their power

and their influence. Exercising the magistracy in the Indian villages they levy the capitation-tax; they not only delight in becoming the instruments of the oppressions of the whites; but they also make use of their power and authority, to extort small sums for their own advantage. The AZTEC NOBILITY display the same vulgarity of manners, and the same want of civilization with the lower Indians. They remain, as it were, in the same state of insulation and examples of native Indians, enjoying the *Casciango*; following the sword or the law are infinitely rare. There are more Indians to be found in ecclesiastical functions, particularly in that of parish-priest.

It is a mistaken notion that the natives are compelled to work in the mines. The laws which were formerly in force to exact such servitude, have long been abrogated.

The Indian, as well as the Mestizoe, possesses great muscular strength, and is able to support a weight of from 242 to 377lbs. on his shoulders for the space of six hours; exposed all the while

to a temperature of from 71° to 77° Fahrenheit, (as hot as our hottest summer-day.) This would appear almost incredible, were it not every day witnessed. These men usually work in the mines, and are called *Tenateros*.

The Indians pursue the common agricultural labours, and in their habits resemble the cultivators of other countries.

When an Indian attains a certain degree of civilization he displays a great faculty of apprehension, a judicious mind, a natural logic, and a partial disposition to subtilize, or seize the finest differences in the comparison of objects. He reasons coolly and orderly, but never manifests that versatility of imagination, that glow of sentiment, and that creative and animating art, which characterize the nations of the South of Europe, and several tribes of African negroes.

WHITES.

Under the Spanish dynasty there were two classes of white people, namely, Europeans and Creoles. Since the revolution, and now, ano-

ther order of things is established ; the white people may all be considered as creoles or Americans. They amount to about one-fifth part of the whole population.

The whites are in possession of almost the whole of the property in Mexico. The richest mines, the most fertile tracts of land, and the most productive plantations, are in their hands, and some of them derive revenues from their estates far exceeding those of the most opulent European nobility. Though the wealth of the country is mostly in the hands of the creoles, they are far from all being individually rich ; perhaps in no class of society, in no country of the world, do the two extremes of excessive riches and excessive poverty so often meet. The pride of the creoles, an aristocratic feeling founded on their complexion, which gives them distinction, prevents them from pursuing those kinds of labour that are deemed degrading to gentlemen. The consequence is, that their poverty is often greater than that of the Indian, whilst indolence, added to pride, prevents them from following any em-

ployment beyond that of the gaming-table, or becoming the flatterers of the richest members of society.

Whatever of science or learning is cultivated in Mexico, is almost exclusively for the benefit and improvement of this class. The university of Mexico, and the schools of mineralogy and chemistry, are almost solely filled by pupils from this circle.

The inhabitants of remote provinces, twenty years ago, had a difficulty in conceiving that there could be Europeans who did not speak their language, and they considered this ignorance as a mark of low origin; to them the peninsula appeared the very centre of European civilization. It was otherwise with the Americans of the capital; those of them who are acquainted with the French or English literature, fall easily into the contrary extreme. They prefer strangers from other countries to the Spaniards.

The study of mathematics, chemistry, mineralogy, and botany, is general in Mexico, and the Mexicans have the reputation of great perse-

verance in the studies to which they have once addicted themselves.

The service of no house is carried on by slaves.

The Mexicans are endowed by nature with a gentleness of manners rather approaching to effeminacy, as the energy of several European nations easily degenerates into harshness.

The want of sociability, so universal in the Spanish colonies ; and the hatreds which divide the casts of the greatest affinity ; the effects of which shed a bitterness over the life of the colonists, are solely due to the political principles by which those regions have been governed since the sixteenth century.

THE MIXED CLASSES

Have in process of time become a very important portion of the population. In a country where rank depends more on the complexion than on endowments, which in other countries confer distinction, it is not surprising that almost every shade has its limits defined by terms which,

though apparently only expressing the colour, do in reality express the rank of the individual. The number of the mixed classes is generally estimated to be equal to the Indians. They are none of them in a state of slavery, but form the class from whence the lower kinds of traders, manufacturers, servants, sailors, and labourers, are furnished. They constitute the lower and middle class of society in general, though some of them rise to wealth and knowledge; and thus, by connecting themselves with a class whiter, prepare their offspring for the highest municipal stations.

THE NEGROES, OR BLACKS,

Are very few in number, whether slaves or freemen, and these are severally employed in the hot countries on the coast, which are equally destructive of the lives of the Indians from the interior, and the newly-imported natives of Europe.*

* Slavery is now abolished (1824.)

CLIMATE AND DISEASES.

One-half the kingdom is situated under the burning sky of the tropics, and the other under the temperate zone. The physical climate of a country does not altogether depend on its distance from the poles, but also on its elevation, proximity to the sea, figure, and other local circumstances.

The interior of the kingdom, or those provinces situated in the torrid zone, enjoy a cold rather than a temperate climate. Along the coast and the southern regions of the intendancies of Valladolid, Mexico, and Puebla, are low grounds. The mean temperature of those plains is 77° of Fahrenheit; and when Europeans, not seasoned to the climate, remain in these countries for any time, particularly in populous cities, they are subject to all diseases incidental to the West-Indies—the yellow fever, called *vomito prieto*, or black vomit, and intermittent fevers.

On the eastern coast, the great heats are occasionally interrupted by strata of cold air, brought

by the winds from Hudson's Bay. These impetuous winds are called hurricanes, and blow from October to March. On the declivity of the Cordilleras, at the elevation of from 3936 to 4920 feet, there reigns a perpetual spring, a temperature which never varies more than seven or eight degrees of Fahrenheit; the extremes of heat and cold are there unknown. The natives give to this region the name of *Tierras Templadas*, in which the mean heat of the whole year is from 68° to 70° Fahrenheit. Such is the fine climate of Zalappa, Tasco, and Chilpinsango.

In the *terrias frias*, or torrid zone, the plains are elevated more than 7217 feet, of which the mean temperature is under 62° Fahrenheit.

In the capital of Mexico, the thermometer has been known to fall several degrees below the freezing point; but this is a very rare phenomenon, and the winters are usually as mild as at Naples. In the coldest season, the mean heat of the day is from 55° to 70° Fahrenheit. In summer, the thermometer never rises in the shade above 75° of Fahrenheit. The mean temperature of the

whole table land of Mexico is 62° of Fahrenheit, which is equal to the temperature of Rome ; but the plains, more elevated than the valley of Mexico, possess, within the tropics, a rude and disagreeable climate, even to an inhabitant of the north. Such are the plains of Toluca and the heights of Guchilaque ; where, a great part of the day, the thermometer never exceeds from 43° to 46° Fahrenheit. It will be perceived, that this vast country varies very much, according to the situation of its different parts. The maritime places are hot, unhealthy, and moist. The lands, which lie in the neighbourhood of high mountains, the tops of which are always covered with snow, must of necessity be cold. All the other inland countries enjoy a climate so mild and benign, that they neither feel the rigour of winter nor the heats of summer. No other fire is necessary in winter than the sun's rays to give warmth : no other relief is wanted in the season of heat but the shade : the same clothing which covers men in the dog-days defends them in January ; and the animals sleep all the year under the open sky.

THE DISEASES prevalent in Mexico, *generally* are but few ; but on the coasts and low lands the yellow fever is as violent as in any other hot climate. At Vera-Cruz the fever commences with the hot months ; namely, June and July, and disappears again in the month of December. It is more fatal there, perhaps, than in any other part of the habitable globe, and is called by the Spaniards *vomito prieto*, or black vomit, from the black matter which is ejected from the stomach.

The air, during the hot months, is supposed to be impregnated with a particular kind of miasmata; which communicates infection, more or less, according to the predisposed state of the constitution. An immediate removal from the spot into higher land, is the most effective mode of recovery ; for it has been proved, that at Vera-Cruz the fever has raged with the greatest violence ; when at four leagues distance, where the ground suddenly rises to 300 feet above the level of the sea, the fever is unknown. From the months of December to June the country is exceedingly healthy.

The small-pox, formerly, made dreadful rav-

ages amongst the unfortunate inhabitants, unacquainted as they then were with its happy antidote ; and proved to them as great a plague as that of Constantinople or Algiers.

Intermittent fevers are very rare, except in the low lands, where they are as common as in other parts of the West-Indies ; and dysenteries are also prevalent in similar situations.

RIVERS AND LAKES.

Mexico is abundantly supplied with rivers of very considerable size—some of them find their exit into the Gulf of Mexico, and others into the Pacific Ocean. The Alvarado rises amongst the mountains of Zapotecas, and discharges itself by three *navigable* mouths into the Gulf of Mexico, 80 miles distant from Vera-Cruz. The river *Gaudalaxara* is the most celebrated of those which empty themselves into the Pacific. It takes its source from Tolocan ; and, after running a course of 600 miles, discharges itself into the Ocean in 22° north latitude.

It also contains both salt and fresh water lakes, and those at a very considerable elevation. Pazguaro, Nicuragua, and Chapalean, are the most extensive, but the most remarkable are those in the Valley of Mexico; upon one of which Tezcuco, the capital of Mexico, once stood; but the waters have since retreated from it to a very great distance, in consequence of the Spaniards having diverted the course of some of the streams which supplied it. The Lake of Tezcuco is salt, and contains both the *muriate of soda* (common salt), and *carbonate of soda* (kelp), but not any *sulphate*, although sulphuretted hydrogen gas is constantly emitted from its surface. The Lake of Chalco is a fresh-water lake, and is about 15 miles in extent, and communicates with the Lake of Tezcuco. In addition to these, there are many smaller lakes, and a great many mineral springs of the *nitrous*, *aluminous*, and *sulphureous* kinds; some of them so hot as 212° of Fahrenheit. There are also several *petrifying* springs. Many of the rivers and streams form beautiful cascades, parti-

cularly the Guadalajara, at a place called *Tempisque*, 15 miles southward of that city. Along a deep river, called *Atoyaque*, is a natural bridge, consisting of a vast mound of earth, over which carriages pass conveniently.

MOUNTAINS AND VOLCANOS, GENERAL FACE OF THE COUNTRY, ROADS, &c. &c.

The great chain of mountains, which passes in nearly a straight line north and south through the whole kingdom, is called the Andes; the most considerable of which is known in Mexico by the name of *Sierra Madre*, particularly in Cinaloa and Tarahumara, provinces of no less than 1200 miles distant from the capital. The most important part of Mexico is the table land, which occupies the centre of the viceroyalty. It expands itself into a great breadth, and, without deep intersecting valleys, produces an extensive plain, equal in fertility to any part of the globe, and superior in salubrity to any other within the

tropics, except similarly elevated spots. The mean height of this plain is 7000 feet above the level of the sea, yet it abounds with elevations, some of which enter the regions of perpetual snow, and others whose tops are covered with snow during the greater part of the year. These masses of snow communicate a refreshing coolness to the air at all times, and in the warmest seasons the melting of them produces constant streams, which communicate verdure and fertility during their course. On the eastern side of Mexico, towards Vera-Cruz, the elevation is most abrupt, and, when attained, the most uniform. In descending from the city of Mexico to the westward, towards Acapulco, the fall is more gradual, but more interrupted by irregular elevations which intervene, than to the eastward of the city. The northern side of the plain more gradually descends, and terminates at a greater distance from the medium level, than either the eastern or the western sides.

It is continued to the north-east 500 miles, and to the north-west a still greater distance. A high ridge then separates one side of the vice-

royalty from the other, which is scarcely passable at any point, and divides the two parts of the country as securely as an elevated wall, or a fathomless cavern.

Although the table land of Mexico is, perhaps, the most healthy district on the globe, yet the other parts of the viceroyalty, on the borders of the sea, partake of the ungenial properties of the torrid zone. The eastern shore is less healthy than the western. The inhabitants of the whole coast, from Tabasco to the river Mexicana, are subject to fluxes and intermittent and bilious fevers, which lessen the enjoyments and shorten the duration of human life ; and, though the western shores are less severely, they are not less frequently visited by the same maladies.

The eastern and western access to this important plain are both attended with difficulty and fatigue. The road from Vera-Cruz to Mexico, and from thence to Acapulco, are both impassable for wheel-carriages ; and passengers who cannot travel on foot, or endure the fatigue of horses or mules, are conveyed in litters, a

kind of sedan-chair, the long poles of which are fastened to the sides of two mules, one of which precedes and the other follows the carriage. A road, however, of the most magnificent kind is now constructing from Vera-Cruz to the capital ; great progress has been made in it ; and but for the interruptions caused by the tumults, which began in 1810, it would have been completed by this time : it is carrying on in some parts by the sides, in others over the tops of the mountains, and in one part it crosses a mountain 10,400 feet above the level of the sea, and 3,000 feet higher than the spot on which the city of Mexico stands.* Whenever this communication shall be completed, it will give a wonderful stimulus to the agriculture of Mexico, which, for want of roads to convey its surplus produce, cultivates only as much as is required by the

* There is now (1824) a good carriage-road from Vera-Cruz to Mexico, from Mexico to Guanajuato, and from thence to St. Luis Potosi. A steam-engine has arrived at the Real de Catorce, in the province of St. Luis Potosi, to be used in working a mine in the possession of Messrs. Gordon and Murphy, which is a practical proof that there are no difficulties in the transport of machinery in that country.

domestic consumption ; and hence, when a year of less than usual fecundity occurs, it is exposed to great scarcity, if not to absolute famine. To the northern part of the viceroyalty, where it is of less consequence, the communication is so much better, that a coach may travel all the way from the capital to the city of Santa Fé, a distance of 440 leagues, with no interruption, and with very little risk. As the road to Aca-pulco is not passable for wheel-carriages, those commodities which Asia furnishes to the commerce of Mexico are conveyed on the backs of mules. Rivers of great extent, and subject to frequent inundations, present obstacles which are difficult to conquer. Large sums have been destined to construct bridges over two of these rivers, the Papagallo and the Mescala, but without effect, and passengers must be conveyed across them on temporary rafts, made of reeds, which are rendered buoyant by having gourds beneath them. These rafts are guided by Indians accustomed to the business, who swim with one hand, and direct the course of the floating raft with the other. A road has been begun

from Vera-Cruz to Perote, the place at which the silver and other valuable commodities are collected and deposited, till they can be conveyed to the coast. Already £600,000 sterling has been expended on it. The cost per mile is about £700, in a country where the labour of Indians, who are principally employed on it, does not cost one-half as much as the wages of labourers in Europe. This road is broad, solid, and of easy ascent, and equals the celebrated roads of the Simplon and Mount Cenis. Pillars of porphyry are intended to be placed along it, which will both indicate the distance and the elevation of the spot above the level of the sea.

VOLCANOS .

Are more numerous in the kingdom of Mexico than in any other portion of the globe. Divided as it is by a long chain of mountains, some of which exceed in height, by many thousand feet, the highest mountains in the world, the summits of which are the common apertures for volcanic

matter, it is not surprising that so many should exist.

The following is a list of the volcanos at present in activity.

Orizaba, or Citlaltepētēl.

Popocatepētēl, or volcano de la Puebla.

Tuxtla.

Zorullo.

Colima.

Gautimala and Nicaragua.

Soconusco.

Sacatepeque.

Hamilpas.

Atilan.

Fuegos de Gautimala.

Acatinango.

Sunil.

Toliman.

Isalco.

Sacatecoluca, near the Río del Empa.

San-Vincente.

Traapa.

Besotlen.

Cocivina, near the Gulf of Conchagua.

Viego, near the port of Rialexo.

Momotombo.

Talica, near San-Leon de Nicaragua.

Granada.

Bombacho.

Papagallo.

Barua, south of the Gulf of Nicoya.

Sotara

Purace

} Group of Sopayan.

Pasto.

Rio Fragua.

Cumbal

Chiles

Azufral

} Group of the Province de los Pastos.

It is unknown whether the volcanoes of the north-west coast have recently made any eruption.

Orizaba is 17,300 feet high; the streams of lava observed on the sides of the mountain, remove every doubt of its volcanic origin; but no recent eruptions are known.

Popocatepetl has smoked ever since the con-

quest of Mexico. This volcano is always burning, and has projected lava from time immemorial : its height is 17,600 feet above the level of the sea.

Tuxtla is situated to the south-west of Vera-Cruz. Its last very considerable eruption occurred in 1793 ; the ejected ashes were then carried as far as Perote, a distance, in a straight line, of 57 leagues.

Zorullo. The circumstance which gave rise to this volcano is, perhaps, one of the most extraordinary physical revolutions which the annals of our planet contain. In the middle of a continent, at 86 leagues distance from any active volcano, the earth rose to the extent of three or four square miles in the form of a bladder, on the night of the 28th and on the 29th of September, 1759. In the centre of a thousand inflamed cones, six mountains, from 1,300 to 1,700 feet high, above the level of the surrounding country, suddenly arose. The principal of them is *Zorullo*, the height of which is 1,700 feet. Its eruptions continued until the month of February, 1760. The subterranean fire is now very active.

The connection of the volcano of *Pasto* with those of the province of *Quito*, was shown in a striking manner in 1796; a cloud of smoke had existed from the month of November, 1796, from the volcano of *Pasto*; but, to the great surprise of all the inhabitants of the city of that name, the smoke suddenly disappeared on the 4th of February, 1797. This was precisely the moment at which, at 65 leagues distant, the city of *Rio-bamba*, near *Turunguagua*, was destroyed by a tremendous earthquake.

AGRICULTURE AND ITS PRODUCTS.

The view taken of the face of the country must have shown that it is capable of producing all the fruits which can be found in the various climates and countries of the globe. In the account of its agriculture we must, however, enumerate and describe not what it is capable of producing, but what it actually does produce. Indian corn or maize is the most important to the natives of any aliment which is known. It

is cultivated in Mexico from the warmest regions up to the height of 9000 feet above the level of the ocean. Its fecundity, in favourable years, in fertile soils, and in proper situations, is wonderful. Its increase in these circumstances has been ascertained to be from three to four hundred times the quantity of the seed that was sown. The general average of the increase is stated to be from 130 to 150 for one. When it returns no more than seventy for one, the cultivation is thought to be not worth continuing. It is used for food in a variety of ways; the green ear is boiled or roasted, and eaten in that state, when it is not unlike green pease. When ripe it is bruised to a flour for bread, or for thickening the soups of the inferior casts. It is used on the declivity of the mountains, above the height in which the sugar-cane will flourish, to make an ardent spirit, in the use of which the Indians indulge to great excess. By expressing the juice from the stalk a sugar is formed, but the sugar-cane having of late been much extended in its growth, has, in a great measure, super-

seded this application of the maize. Though maize is sometimes a most abundant crop, yet there are seasons when, in some districts, it almost wholly fails, and the inhabitants feel the severest want. The price of this grain regulates that of almost every other commodity in Mexico. When either a premature frost, or the absence of rain, destroys the harvest, both human beings and the domesticated animals suffer the severest misery. It is, however, a slight alleviation of their sufferings, that the scarcity seldom visits both the warmer and the colder regions in the same year ; but the badness of the roads, and the great distance from one district to another, prevents the surplus of one part from relieving the distress of another to any effectual extent. Wheat is one of the presents which the old continent has conferred on the new. The first introduction of it into Mexico was in the year 1580, when a negro-slave of Cortez found three or four grains of it among some of the rice. These were sown, and the produce distributed to be again sown, till it has become general. The highest and the

lowest regions in Mexico are equally unfit for the cultivation of wheat. It is only grown in the southern provinces, at the elevation of 2650 to 4250 feet above the level of the ocean. In the more northern provinces it is produced at a lower elevation. The increase of wheat, in most parts of Europe, is calculated to be about five for one on the average of different countries; but in Mexico, at the proper elevation, it generally yields from thirty to forty for one, and at Cholula it has exceeded seventy or eighty for one. The great impediment to the cultivation of wheat and other grains of the *cerealia* species, is the want of moisture. Long-continued droughts frequently destroy the hopes of the cultivator. In no part of the world does artificial irrigation so abundantly repay the expence that is incurred; but, owing to want of skill in conducting the rivulets which the melting of the snows form, and perhaps more to the want of capital, this important operation is either omitted or negligently executed. On some farms, where the system of irrigation is followed, they water the wheat

twice ; first, when it shoots up in January, and again in March, when the ear begins to be formed. By leaving the land flooded for some weeks at this latter period, the tenacious soil imbibes such a quantity of moisture, as enables it to resist the deleterious effects of the long droughts, and the burning sun which it subsequently endures. In these irrigated farms, as in Egypt, the seed is sown when the flooding commences, and this is thought to destroy many of those weeds which would be injurious to the crop. The tillering of the wheat-plants in Mexico, as well as the number of grains in each ear, is most astonishing. In the best lands, and in the most favourable seasons, we have seldom seen more than six or seven shoots from each root that produced ears, and those ears average from sixty to seventy grains in each. In Zelaya, a cultivator took, at random, from a field of wheat forty plants, and Humboldt found from forty to seventy stalks from each plant. The grains were counted, and were found in different ears to be from 120 to 160. The soil of the wheat-lands is ge-

nerally composed of tenacious clay, mixed with basaltés and amygdaloïds, which, though difficult to pulverise, such land, when brought into proper culture, is best adapted for the growth of that plant. Rye and barley, as they resist a greater degree of cold than wheat, are grown on higher elevations. The produce is not much greater than on the lands of some of the best cultivators in England. Oats are scarcely cultivated in Mexico, where, as in Spain, the horses are fed on barley, though sometimes maize is used for that purpose.

Potatoes, for which Europe is indebted to America, are much cultivated in Mexico. It is not an indigenous plant, but was transported from the mountainous parts of Peru, at a very early period after the conquest of that country. It has been generally asserted, that the potatoe is a spontaneous production of the Andes, but Humboldt, and his companion Bonpland, though diligently herborizing from the fifth degree of north to the twelfth of south latitude, found none in a wild state with nutritive roots. They, how-

ever, were led to suppose, that in the Andes of Chili they are indigenous. In Mexico, they are cultivated on the highest inhabited lands. The natives preserve them for several years, by exposing them first to the frost and then to the heat of the sun. They grow to a large size; some of them were found by Humboldt to measure from twelve to thirteen inches in diameter, and to be better tasted than any that are grown on our continent.

The banana is, to the inhabitants of warm regions, what grain is to the people of temperate and cold countries; but infinitely more beneficial, in as much as on the same portion of land, and with the same quantity of labour, a much greater quantity of nutritive sustenance may be produced. Within eight months after planting, the banana begins to form clusters, and these may be gathered in the tenth or eleventh month of their growth. When the stalk is cut, some other shoots from it, about two-thirds the height of the parent plant, are left standing, and they bear fruit in about three months after. Thus a plantation

is perpetuated, without any other subsequent labour than that of cutting the stalks on which the fruit has ripened, and occasionally digging and dressing round the roots. The ripe fruit of the banana resembles, in appearance, the bean pod, but is far larger. When exposed to the sun, it is dried in the same manner as the figs of the south of Europe. The skin then becomes black, and emits a smell resembling that of a smoked ham, and in that state becomes an object of considerable internal traffic. Its taste is agreeable, and it is considered to be very wholesome, whilst the ripe fruit, in its crude state, is found difficult of digestion by newly-arrived Europeans. The green fruit is frequently cut into slices and dried in the sun, and being thus rendered friable, is reduced to powder, and serves the purposes of flour in many culinary preparations. The facility with which this food is produced, gives it an advantage over every other alimentary substance in the same climate. Even the bread-fruit, though it affords food through almost the whole year, may be destroyed by an enemy, and

cannot be quickly reproduced ; whilst the banana, if destroyed, may become available again for subsistence in a few months by planting suckers. The produce of the banana, as compared to that of wheat, is estimated as 133 to 1, and to potatoes as 44 to 1. The facility with which food can thus be obtained in the hot regions, necessarily creates great indolence in the inhabitants. With two days slight labour in each week, a man may gain sufficient subsistence to support a family ; and yet such is the love of their native spots with the inhabitants of the mountains, that though a single frost may destroy the labour of the year, none of them will emigrate to the thinly inhabited plains, where nature showers her gifts with such profusion.

In the same temperature which favours the cultivation of the banana, the manioc, or cassava, is grown, and, like it, is abundantly productive of aliment. There are two kinds of manioc ; one, called the sweet, may be eaten without injury ; the other, the bitter, is a very active poison in its crude state ; both are made into bread, but

the latter is most generally used for that purpose. The root is first dried ; it is then grated, and the juice carefully expressed, by which means a tolerably palatable and wholesome flour is produced. It is generally made into thin cakes, not unlike the oat-cakes eaten by the labourers in the west of Yorkshire. It has the great property of keeping a very long time, and is not liable to be attacked by worms, or the other insects which, in warm climates, are so destructive of other bread ; the cultivation of the manioc requires more care than the banana, and in some measure resembles that of potatoes ; the slips are planted, and in seven or eight months the harvest may be gathered.

Almost every species of fruit is produced in Mexico, and the esculent vegetables of every climate are profusely scattered ; some of these are indigenous, but some of the best, as the various cabbages, the turnip, the carrot, and pease, have been introduced by the European settlers, and have multiplied till they have become as abundant as the native productions. The jealousy of

Spain has prevented vines and olives from being extensively cultivated ; but when they are attended to, they yield abundance of fruit. The court of Spain, instigated by the commercial jealousy of its merchants and agriculturists, has always discouraged the cultivation of the vine, the olive, the mulberry, and of hemp and flax. They are generally prohibited in the colonies ; but it is difficult to execute the law with rigid strictness. Whilst Humboldt was in Mexico, an order was received from Madrid, to root out all the vines in the northern part of the viceroyalty, because the merchants of Cadiz complained that the vent for their wines and brandies had diminished ; but the viceroy would not obey the order, judging that, notwithstanding the great patience of the inhabitants, they would not submit to have their property laid waste, merely to gratify the cupidity of the European monopolists.

After sketching those productions which constitute the *food* of man, we may notice those which furnish his *beverages*. The most important of these is called the Maguey, a species of

cactus, or opuntia. The plants are set about five feet asunder, in rows. When the head of the plant throws forth the bundle of central leaves, they are cut off, and a hole is scooped in the stalk, which is covered with the leaves. In this hollow the plant seems to deposit all the juice, which, without the excision, would go to form the flowers. It is a real vegetable spring, running for two or three months, and which may be emptied twice or thrice in the day. The plants are very productive; a single one will yield 150 quarts of honey (for so in this state it is called) annually. It is placed in a situation to ferment, an operation which takes place in a few days, when it becomes fit to drink, and is called *Pulque*. It is said in its taste to resemble cider, but has a most disgusting smell, which, for a long time, prevents Europeans from tasting it. When accustomed to it, however, people become very fond of it, and account it healthy and nutritive. The cultivation of the plant which produces this liquor is of vast importance, both to the public revenue and to the comfort of individuals. It

pays a duty on its introduction to the cities, and in the year 1798, the amount of the tax produced at the gates of the cities of Mexico, Toluca, and Puebla, amounted to near £200,000 sterling. By distillation of pulque, a very intoxicating kind of brandy is produced, which, though prohibited by the laws, in order to favour the brandies of Spain, is of very extensive consumption. The plant from which the pulque is made, has other valuable purposes to which it is adapted. It is used in making ropes, and even paper; it furnishes the inhabitants with a thread, called pita; its juice is used as a caustic to wounds; and its prickles serve the Indians for needles and pins.

The soil of some parts of Mexico is admirably adapted to the cultivation of tobacco, and perhaps in no portion of the globe is the consumption of that plant greater. It has been always a subject of taxation in every part of the Spanish dominions; but, in 1764, the royal monopoly, or farming of it, was introduced to this viceroyalty.

Sugar and rum are produced in New Spain,

and, as before stated, want only good means of intercourse to increase most rapidly. As the cultivation of sugar is well known, it is needless here to give a description of it; but we cannot omit the striking result of a calculation made by Humboldt, viz. that all the sugar consumed in France, amounting to about 18,000 tons, might be produced on seven leagues square of land in the equinoctial regions. Cotton is grown in Mexico, but to an extent too limited to admit of any considerable exportation; the far greater part is appropriated to domestic consumption, and the whole sent to Spain was not valued at more than £25,000. The quantity was not sufficient to supply New Spain, and it drew what it required from Guatemala and New Granada. Some valuable drugs are produced in Mexico, as sarsaparilla, jalap, vanilla, snakeroot, and some others, which, however important to the healing art, are of too little consequence to the agriculture or the commerce of the country to deserve detailed notices. Of dyeing drugs, indigo is produced, but in very limited quantities,

and scarcely more than sufficient for the few domestic manufactories. Cochineal is, however, a product exclusively hitherto Mexican, and deserves some attention. It was certainly cultivated long before America was known to Europeans. The cultivation of cochineal is at present limited to the intendancy of Oaxaca. Not more than fifty years ago, it was produced in the province of Yucatan ; but, on a single night, all the nopals, on which the cochineal insect lives, were cut down, and the breed consequently exterminated. The Indians assert, that this was done by the government, to increase the price of the stock on hand, and to confine the whole growth to the province of Misteca, in Oaxaca, where it is chiefly produced. The whites, on the other hand, aver that the Indians, irritated at the low price which the merchants had fixed for cochineal, formed a combination, and destroyed at once both the insects and the plants on which they were reared. There are two species of cochineal, called *Grana fina* and *Grana silvestre* ; one the wild, the other, if we may be allowed the

term, the domesticated kind. The wild is found in several parts of the world, but though pains have been taken to introduce the better kind in many countries, they have hitherto been unsuccessful. The wild cochineal is covered with a cottony down, which prevents the rings on its back from being visible ; the fine is distinguished by being covered with a mealy kind of white powder, which does not conceal the wrinkles on its back. Whether these two insects are of the same species is still a subject of doubt among the most acute entomologists. It is, however, certain, that they are bred on different plants, but yet it is ascertained that they couple together.

The nopal trees, on which the fine cochineal is bred, is of the cactus tribe, known by the name of the prickly tuna ; but this variety has its fruit smaller, of an insipid taste, and white, instead of red. When designed to rear the cochineal insect, it is not suffered to grow to more than two feet in height. They are planted on land well cleared of weeds, and of other trees, which are usually burnt on the ground. The

ground is cleaned twice in each year, and, if this be accurately executed, and the soil favourable, in the third year they become fit to rear the insects. In the months of April or May, the proprietors, called *Nopaleros*, purchase branches or joints of the *Tuna de Castilla*, with the young cochineals recently hatched upon them. These branches, though separated from their roots, preserve their moisture for several months. The Indians, who collect the young insects, keep them about three weeks, either in their huts or in caverns, where the branches to which they are attached are suspended under cover; after which they are exposed to the open air. The growth of these insects is rapid, and, in August and September, the mother cochineal have eggs not hatched, and are big with eggs a second time. Their laying continues from thirteen to fifteen days. In about four months after placing the cochineals on the nopals, the first harvest may be collected in the warmest situations; and, in those a little cooler, though the insect is equally valuable, somewhat later. Much

care is necessary in keeping the nopals clean, and Indian women sit down many hours to a single plant to brush them with the tail of the squirrel. The produce of the trees varies considerably; in some districts a pound of the semilla, sown in October, will yield a harvest of twelve pounds in January, and leave sufficient of the eggs to continue the produce till May, in which time they sometimes collect thirty-six pounds more. In other districts, where they are occasionally exposed to slight frosts, though great care is taken to cover the plants at night, they scarcely gather more than twelve pounds for each pound that has been sown. At the time of harvest, the insects are killed, sometimes by throwing them into boiling water, sometimes by placing them in heaps exposed to the burning sun, and sometimes in a kind of vapour bath. This last method is deemed the best, as it preserves the whitish powder on the body of the insect, which gives it an increased value in the estimation of the merchants at Vera Cruz and Cadiz. There are rigid laws to prevent the adulteration of this

valuable commodity, but they are found to be insufficient wholly to stop the practice. It is, however, generally believed, that the mixture of other substances, where it is grown, is trifling in comparison with the additions made to it at Vera Cruz, and in the ports of Spain. The whole quantity exported from Mexico, *communibus annis*, was about 2,500,000 pounds, which, before the heavy duties imposed on it, both in Mexico and Spain, was not estimated at more than £600,000. The quantity produced has greatly diminished of late years. The Indians have discovered, that other commodities pay them better for the labour of cultivating; and hence, in the last ten years, the produce is lessened nearly one half. The dyers of Europe have, however, found a substitute, so that, with the reduced supply, there has been no sensible increase in the price. Lac lake, a commodity from India, has, in a great measure, superseded it, both in England and France, and will probably, at no distant period, do so in other countries.

Bees-wax is an article of considerable import-

ance in a country where the pomp of religious worship requires a great supply of wax-tapers. In the churches of the cities, and even of the Indian villages, the consumption is enormous. The indigenous bee of New Spain differs from that of Europe in having no sting, or at least none of sufficient strength to inflict the slightest wound. They are known by the name of *Angelitos*, little angels. The wax is abundant, but it is more difficult to bleach than that which is produced by the bee of Europe. Some of the Indians have farms of several hundred hives. Mexico does not produce sufficient wax for its own consumption, but obtains the requisite quantity from Cuba, where both the European bee and the American are carefully bred for the sake of the wax.

Besides the productions of agriculture, which have been enumerated, Mexico is abundantly supplied with animal wealth. When first discovered, the inhabitants had few or no domesticated animals. Europe has, however, furnished them with a few, which have become the rudiments of immense herds; they now cover many

the plains, and furnish to their inhabitants an ample supply of animal food. The tallow of their oxen suffices for all the manufactories of soap and candles ; oil being too valuable to be used for the former of these purposes. Hides were formerly exported from Mexico to Spain, but, of late, the population and their wealth has so increased, that they are all converted into leather for their own consumption.

Sheep have never been encouraged, though the pastures are admirably adapted for their feed and propagation. The wool, of what few they have produced, is consumed in their manufactories ; and as cotton cloths are better suited for the greater part of Mexico than woollen, we may attribute the neglect of sheep to that circumstance. Turkies and ducks were originally sent to Europe from America, which, in return, received the common fowls of the Old Continent ; but the common goose of Europe is not yet to be found in any of the Spanish settlements in America.

Having enumerated the most important agri-

cultural productions of Mexico, we must state, that, though the principal branch of industry which has contributed to enrich the country, agriculture is still by no means in that state of activity to which it is capable of arriving. The indolence natural to man, when all his positive wants can be supplied with little exertion, must act as an impediment to the progress of agriculture, as well as of all the other arts. The want of roads, canals, and navigable rivers, whilst it continues, is an insuperable bar to great improvements; and, when to these are added the restrictions imposed by an impolitic government, we are rather surprised at the progress Mexico has made, than that she has made no greater. Amidst other impediments to her improvement, the want of capital is a most important one. It is so in every country, and peculiarly so here. The capitals acquired by mining have frequently been afterwards employed to give activity to agriculture, the only purpose to which capital can be beneficially applied in a country where little or no commerce exists. The convents, and

other ecclesiastical communities, possess but little landed property. Their real wealth, consisting of the accumulations from tithes, and other clerical sources, has been generally dedicated to agricultural improvements. The capital of the clerical bodies, amounting to more than £10,000,000 sterling, is lent out, in small sums, on interest, to proprietors of land, and secured by mortgages on their estates. The benefit conferred by such a capital applied to the agriculture,—a capital gradually increasing, must be very considerable. Such was the impression of its importance on the spot, that when, under the ministry of Godoy, orders were transmitted to Mexico to send these funds to Europe, it caused general murmurs; and though the viceroy had not sufficient firmness to defer, or to demonstrate the impolicy of executing the decree, but attempted to enforce it, the difficulty was so great, that in two years only the small sum of £250,000 could be collected. One legal evil is felt in Mexico, as it is in Spain. The greater portion of the land, especially the larger tracts of it, is granted in what is called *Mayorazgos*, a species

of entail which prevents alienation, or the division of land into smaller allotments, such as would be suitable for the purchase and the improvement of the class of small capitalists.

NATURAL PRODUCTIONS,

ANIMAL, VEGETABLE, AND MINERAL.

ANIMALS.

The animals found in the kingdom of Mexico are common to South America ; the quadrupeds consist of lions, tygers, wild cats, bears, wolves, foxes, the common stags, bucks, wild goats, badgers, pole-cats, weasles, martins, squirrels, polatucas, rabbits, hares, otters, and rats.

The white stag is found wild, on the mountains of New Spain. The Mexican hog, the moufette, the opossum, the armadillo, the *techichi*, a small animal resembling a dog ; which, being perfectly dumb, gave occasion to a report, that the Mexican dogs could not bark. The flesh of this animal was eaten by the inhabitants, and esteemed agreeable food. After the conquest of Mexico, the Spaniards having neither large cattle

or sheep, provided their markets with this quadruped; by which means the species soon became extinct, though it had previously been very numerous.

The land-squirrel is very plentiful in the kingdom of Michuacan, has great elegance of form, and is extremely graceful in its movements; but it cannot be tamed, and bites most furiously every person who approaches it. Besides these, there are sea-lions, ratoon, and that voracious animal named the *tapir*. It has at one bite been seen to tear off two or three hands-breadth of skin from a hound, and at another a whole leg and thigh. The flesh is eatable, and its skin is valuable on account of its being sufficiently strong to resist musket-balls.

There are likewise great numbers of monkeys, of many different kinds; some of which have heads like dogs: others are strong and fierce, equalling a man in stature when they stand upright. Among the animals peculiar to Mexico, is one named *coyoto*, which appears to have been inaccurately described by natural historians. It is about the size of a mastiff, but

more slender; the eyes are yellow and sparkling, ears small, pointed, and erect; the snout blackish, strong limbs, and the feet armed with large crooked nails; the tail is thick and hairy, the skin a mixture of black, brown, and white; and the voice is compounded of the howl of a wolf and the bark of a dog. It pursues the deer, and will sometimes attack men. Its usual pace is a trot, but so quick that a horse, at full gallop, can scarcely overtake it. The *tlalcojotl*, or *talcayoto*, is about the size of a middling dog, and the largest animal that lives under the earth. Its head has some resemblance to that of a cat; but, in colour and length of hair, resembles a lion. It has a long thick tail, and feeds upon poultry and small animals, which it catches in the night. The *tepeizuintli*, or mountain dog, though it is not larger than a small dog, is so bold that it attacks deer and sometimes kills them. Its hair and tail are long, the body black, but the head, neck, and breast are white.

Another animal, larger than the two foregoing, is called *xoloitzcuintli*; some of them are no less than four feet in length. It has a face like

the dog, but tusks like the wolf, with erect ears, the neck large, and the tail long. It is entirely destitute of hair, excepting only the snout, where there are some thick crooked bristles. The whole body is covered with a smooth, soft, ash-coloured skin, spotted with black and tawney. This species of animal, as well as the former, are almost extinct.

A curious animal, of the mole-kind, is called *tozan* or *toza*. It is about the size of an European mole, but very different otherwise. The body is about seven or eight inches long, and well made ; the snout like that of a mouse, the ears small and round, with the tail short. The mouth is armed with strong teeth, and its paws are furnished with very strong crooked nails, with which it digs its habitation in the earth. It is extremely destructive to the corn-fields, by the quantity of corn it steals, and to the highways, by the number of holes it makes in them ; for when, on account of the dimness of its sight, it cannot find its first hole, it makes another. It digs the earth with its claws and two canine teeth, which it has in the upper jaw.

BIRDS.

The birds are so numerous, and of such varied character, that Mexico has been called the country of birds.

Hernandez describes above 200 peculiar to the country. He allows to the eagles and hawks of Mexico a superiority over those of Europe ; and the falcons of this country were formerly esteemed so excellent, that, by the desire of Philip, a hundred of them were sent every year to Spain. The largest, most beautiful, and valuable kind of eagle, is called by the Mexicans *Stzquehtli*, and will pursue not only the larger kinds of birds, but quadrupeds, and even men. The ravens in Mexico do not, like those of other countries, feed upon carrion, but subsist entirely on corn. The carrion is devoured by birds, called, in America generally, *gallinezzi*; in Mexico, *sopilots* and *aure*.

AQUATIC BIRDS

Are very numerous, and of very great variety. There are, at least, twenty species of ducks, a

vast number of geese, with several kinds of herons, great numbers of swans, quails, water-rails, divers, kingsfishers, pelicans, &c.

The multitude of ducks is sometimes so great, that they cover the fields, and appear at a distance like flocks of sheep.* Some of the herons and egrets are perfectly white, some ash-coloured ; others have the plumage of the body white, whilst the neck, with the tops and upper part of the wings, and part of the tail, are enlivened with a bright scarlet, or beautiful blue.

Numbers of the other classes of birds are valuable for their flesh, plumage, or song ; while some are remarkable for their extraordinary instinct or other properties. Clavigero enumerates more than 70 species of those which afford an

* The Mexicans follow a simple but ingenious method of catching aquatic birds. The lakes of the Mexican vale, as well as others of the kingdom, are frequented by a prodigious number of ducks, geese, and other water birds: they leave some empty gourds to float upon the water where those birds resort, that they may be accustomed to see and approach them without fear. The bird-catcher goes into the water so deep as to hide his body, and covers his head with a gourd; the duck comes to peck at it, and then he pulls them by the feet under water, and in this manner secures as many as he pleases.

agreeable and wholesome food. Besides the common fowls, which were brought from the Canaries to the Antilles, and from these to Mexico, there were, and still are, fowls peculiar to the country itself. These partly resemble the common fowl and partly the peacock, whence they had the name of *gallipavos* from the Spaniards. From Mexico they were imported into Europe, where they have multiplied very fast, especially in Italy, though the common fowls have multiplied much more in Mexico.

There are great numbers of birds valuable for their plumage, which was made use of by the Mexicans in their Mosaic works ; an art which seems now to be totally lost. Peacocks have been carried from the Old Continent to Mexico ; but not being attended to, have propagated very slowly. The birds remarkable for their song are also very numerous ; amongst which, that called the *antxonitl*, by Europeans the *mocking-bird*, is the most remarkable, on account of his counterfeiting naturally the notes of all others it hears.

There are great numbers of beautiful parrots ;

and there is a bird which counterfeits the human voice, but in a kind of burlesque tone, and will follow travellers a great distance. The *tzacua* is remarkable for its instinct. Birds of this kind live in society, every tree being a village or a city to them, having great numbers of nests in the neighbourhood of each other, all hanging from the boughs. One of them, whose office it is to be the head or guard of the village, resides in the middle of the tree; from which it flies about from one nest to another, visiting them all, and, after singing a little, returns to its place, whilst the rest continue perfectly silent. If any bird of a different species approaches the tree, he flies to it, and, with his bill and wings, endeavours to drive it off; but, if a man or any large animal comes near, he flies screaming to another tree; and if at that time any of his fellows happen to be returning to their nests, he meets them, and, changing his note, obliges them to retire again; as soon as he perceives the danger over, he returns to his wonted round of visiting the nests.

REPTILES.

Mexico, like all other American countries, abounds with reptiles, many of them of an enormous size. The crocodiles are not less to be dreaded than those of Africa or Asia, and there are likewise some of those monstrous serpents met with in the East-Indies and in South America : though happily the species of those terrible creatures seems to be nearly extinct, as they are seldom to be found but in some solitary wood or other remote place.

There are great numbers of lizards, some of which the people suppose to be poisonous ; but Clavigero thinks this opinion ill-founded. There are several kinds of poisonous serpents, of which the rattle-snake is one.

AQUATIC ANIMALS

Are also very numerous. There is a species of frog so large that a single one will weigh a pound, and which is excellent food.

FISH.

Of fish proper for food, Clavigero counted upwards of 100 species, without taking in the turtle, crab, lobster, or any other crustaceous animal. The sharks are well-known for their voracity ; a whole sheep-skin, and even a large butcher's-knife, has been found in the belly of one of them. They are accustomed to follow vessels, to devour any filth that is thrown over-board : and they have been known to keep up with ships, sailing before a fair wind, for no less than 500 miles. The bottetto is a fish about eight inches long, but excessively thick. While this fish lives upon the beach, it swells whenever it is touched to an enormous size, and boys often take pleasure in making it burst with a kick. The liver is so poisonous as to kill those who eat it, with strong convulsions, in half an hour after they have partaken of it.

INSECTS.

The number of insects in Mexico is prodigiously great. . There are a variety of beetles: some, of a green colour, which make a great noise in flying. There are also a great number of shining beetles, which emit a phosphoric light at night, as well as flies (commonly called *fire flies*) of the same kind.

There are likewise many kinds of bees and wasps, of which last there is one kind that collects honey of a very sweet nature, and makes wax.

The Lake of Mexico abounds with a kind of fly, the eggs of which are deposited upon the flags and rushes in such quantities as to form large masses. These are collected by the fishermen, and carried to market for sale. They are eaten by both Mexicans and Spaniards, and have much the same taste as caviare. The gnats are very abundant in the moist places and lakes; but the capital, though situated on a lake, is entirely free from them. Butterflies are found in vast numbers, and the wings glow with colours far superior to those of Europe. But, Mexico,

notwithstanding its beauties and advantages, is subject to the dreadful devastations of locusts, which sometimes occasion the most destructive famine.

WORMS.

Some of the worms of Mexico are made use of by the inhabitants as food ; others are poisonous. There are great numbers of scolopendræ and scorpions, some of the former growing to an immense size, even two feet long and two inches thick. The scorpions are numerous, and in the hot parts of the country their poison is so strong as to kill children, and to give terrible pain to adults. Their sting is most dangerous during those hours of the day in which the sun is hottest.

There is a mischievous kind of tick, which, in the hot countries, abounds amongst the grass ; from thence it easily gets upon the clothes, and next upon the skin ; where it fixes with such force, from the particular construction of its feet, that it can scarcely be removed. At first it seems nothing but a small black speck ;

but, in a short time, enlarges to such a degree from the blood which it sucks, that it equals the size of a bean, and then assumes a leaden colour. If it is not speedily removed, a wound is made similar to that which the nigera or chegoe makes.

SILK-WORMS.

Mexico produces silk-worms, and their silk might, doubtless, be manufactured to great advantage, if political reasons had not interfered.

Besides the common silk, there is another, found in the woods, very white, soft, and strong. It grows on the trees in several maritime places, particularly in dry seasons.

COCHINEAL.

The cochineal is an insect, and one of the most valuable products of Mexico, from its producing a beautiful purple dye. Great care is taken to preserve it ; but the best is reared in the province of *Misteca*, and exported to all parts of the world.

PLANTS, GRAIN, FRUIT, &c.

Historians mention no fewer than 1200 plants, which are all indigenous, or natives of the country; but, as these are said to be chiefly medicinal, we must conclude, that provident nature has furnished many more, which are intended for nourishment.

This country abounds with a great variety of flowers, numbers of which are peculiar to itself, while many exotics even rival them in luxuriance; such in particular as are imported from Europe. Water-melons, apples, pears, peaches, apricots, figs, &c. are among the exotics, which thrive equally with any of the indigenous productions.

All the maritime countries abound with coconut trees, of which Hernandez mentions four kinds, the smallest of which is mostly used for chocolate and other drinks. Prior to the introduction of corn from Europe, maize was the

principal grain of Mexico, and of which there were several species. It was brought from America to Spain, and from thence to the countries of Europe. The principal kind of pulse used by the people was the French bean, the different species of which exceed in number those of the maize; and one of them, in particular, not only supported the poorer class, but even the Spanish nobility deemed it a luxury.

Historians enumerate five species of esculent roots, exclusive of many culinary vegetables, imported from the Canaries, Spain, and other European countries. This country produces a variety of palm-trees, from the fibres of the leaves of one species of which the Mexicans manufacture thread. The timber trees are numerous, and, in respect of quality, said not to be inferior to any in the world. There are whole woods of cedars and ebonies; and some trees, mentioned by Clavigero, are of a most stupendous magnitude. This author mentions one that measured 107 Paris feet in height, and Acosta speaks of one that was 16 fathoms in circum-

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ference. A remarkable fir-tree, hollowed by lightning, contained within it 100 young men, according to the testimony of the archbishop of Toledo, who went to view it in the year 1770.

MEDICINAL AND AROMATIC GUMS.

This country abounds also with aromatic and medicinal trees, producing gums, resins, &c. From one of these a balsam is produced, not in the least inferior to the celebrated balsam of Mecca. It is of a reddish black or yellowish white, of a sharp bitter taste, and of a strong but most grateful odour. It is common in the provinces of Panuca and Chilapan, and other warm countries.

The tree producing liquid amber, the liquid storax of the Mexicans, is of a large size, the eaves similar to those of the maple, indented white on one part and dark on the other; the fruit is thorny and round, but polygonous,

with the surface and the angles yellow ; the bark of the tree partly green and partly tawny. By incisions in the trunk they extract the valuable substance named liquid amber ; and the oil of the same name, which is still more valuable. Liquid amber is likewise obtained from a decoction of the branches, but it is inferior to that obtained from the trunk.

The name copalli, in Mexico, is generic, and common to all resins ; but especially signifies those made use of for incense.

There are ten species of these trees, yielding resins of this kind ; the principal of which is that from which the COPAL is got, so well known in medicine and varnishes.

A great quantity of this was made use of by the ancient Mexicans, and is still used for similar purposes by the Spaniards.

The mezquitl, or mezquite, is a species of true acacia, and the gum distilled from it is said to be the true gum arabic. It is a thorny shrub, with branches irregularly disposed ; the leaves small, thin, and pinnated ; the flowers being like those of the birch-tree.

Of the elastic gum, which is found in plenty in Mexico, the natives were used to make foot-balls, which, though heavy, have a better spring than those filled with air. With this they varnish their hats, cloaks, boots, and great coats, in a manner similar to what is done in Europe with wax, and by which means they are rendered water-proof.

MINERALS, AND PRODUCE OF THE MINES.

There is something very striking in the reports which circulate in Europe of the wealth of Mexico and Peru ; but, perhaps, the mineral wealth which those countries furnish, has produced less effect on them than on the nations of the Old Continent, whose activity and intelligence has been forcibly stimulated by it. The mineral riches of Peru have been to no extent applied to sustain agricultural industry, which has languished in consequence. If Peru has not declined within the last century, she has

certainly not advanced much in population or industry, in productions, or in civilization. In Mexico, where the riches from the mines have stimulated agriculture, the progress has been considerable, more especially within the last forty years, in every thing that can conduce to the greatness or the prosperity of a country.

The whole quantity of gold produced in Mexico, on an average of several years, does not amount to more than 7000 marks, or 56,000 ounces, and is worth about £200,000 sterling. This quantity is collected, either by washing the sands in the torrents which descend from the mountains, from some mines of small produce in the intendency of Oaxaca, or from the silver mines, in which it is found combined with that metal. The silver which the mines of Mexico distribute over the globe, is by far the most important part of what has recently been put in circulation. In a series of years at the beginning of the present century, according to the books of revenue by which the tax called the *fifth* is paid, the mean produce has been 22,170,000 piastres;

and, estimating that portion on which the duty was evaded at somewhat less than a seventh part, we may consider the total at least as 25,000,000; worth, at the average rate of silver in Europe, £5,480,000 sterling. This quantity exceeds the whole silver that is produced from all the other parts of America, whether belonging to Spain or Portugal.*

The whole of the silver mines of Mexico are in the Table-land, and most of them are at a great depth from the surface. They have been calculated to amount to nearly three thousand, and are divided into 450 districts, each governed by a council of the mines. It will be easily supposed, that, of these 3000 mines, some must be very inconsiderable, and some very unproductive, when it is ascertained that half of the silver raised in New Spain is the product of only

* The quantities of gold and silver raised in Mexico since its conquest by the Spaniards, are shewn by the official returns, copied from the archives of the royal mines there, amounted, between 1492 and 1803 (311 years), to £1,039,542,690.

three districts, viz. Guanaxuato, Catorce, and Zaccatecas.

LOCAL SITUATION OF ORES.

GOLD.

In Mexico, gold is mostly extracted from alluvial, soil by means of washing; these grounds are common in the province of Sonora.

LUMPS OF GOLD.

In Pimeria Alta, under 31° latitude, lumps of native gold have been found, of five or six pounds weight. In these desert regions, the incursions of savage Indians, the excessive price of provisions, and the want of necessary water are great obstacles to working mines.

Gold is also extracted from veins which traverse primitive mountains, most frequent in the province of Oaxaca, either in gniess or micacious slate. This last rock is particularly rich in gold in the cultivated mines of *Rio San Antonio*; the gangue of the ore, is milk quartz. There

is scarcely a silver mine which does not contain gold. The principal vein in the mine of *Santa Cruz*, at *Villapando*, is traversed by small rotten veins of exceeding richness; the argillaceous loam, with which these veins are filled, contains a great quantity of gold disseminated about.

PORPHYRIES

Of Mexico may be considered, for the most part, as rocks, eminently rich in ores of gold and silver. There is a gold vein at *Villapando*, near *Guanaxuato*.

SILVER.

The greatest quantity of silver furnished from Mexico is derived from the sulphuret, vitreous, arsenical, muriate, prismatic, black, and red silver.

SULPHURET

Of silver, and prismatic black silver ore, is very common in the veins of *Guanaxuato* and *Zacatecas*.

MURIATE

Of silver is very abundant in the mines of Catorce Fresnillo and the Cerro San Pedro, near the town of San Luis Potosi. Colour, olive to leek-green in the veins of Catorce. Muriate of silver is accompanied by molybdate of lead and phosphate of lead.

RED SILVER ORE

Constitutes the principal part of the wealth of Sombrete, Cosala, and Tolaga, near Villalta.

GREYISH WHITE,

Variety, rich in lead, is found in the intendancy of Sonora, in the veins of Cosala, where it is accompanied with argentiferous galena, red silver, brown blende, quartz, and sulphate of barytes.

NATIVE SILVER

Is much less abundant than is generally supposed; it has been found in considerable masses, sometimes weighing 444lb. avoirdupois,

in the mines of Batopilas, in New Biscay. These mines were never briskly wrought.

IRON PYRITES.

A very considerable quantity of silver is produced from the smelting of iron pyrites, found in the Real del Monte, on the vein of Biscania, near the pit of San Pedro. In Sombrerete, the abundance of iron pyrites, disseminated in the red silver ore, is a great obstacle to the process of amalgamation.

COPPER.

The working of the common metals has been much neglected ; copper is found in a native state, and vitreous and oxidulated in the mines of Ingaren, a little to the south of the Soleano of Jurillo, at San Juan Guentanio, in the intendancy of Valladolid, and in the province of New Mexico.

MERCURY.

Few countries have so many indications of cinnabar as the Table-land of the Cordilleras,

from the 19° to 22° of north latitude. In the Intendancies of Guanaxuato and Mexico, mercury is found wherever pits are dug, between San Juan de la Chica and the town of San Felipe, near Rencon del Centeno, in the environs of Celaya, and from Durasno and Terra Neuva to San Luis de la Paz, especially near Chapin, Real de Pozos, San Rafael de los Lobos, and la Soledad.

SULPHURET OF MERCURY

Has been also discovered at Axuchitlan and Zapote, near Chiranganguero, in the Intendancy of Valladolid; at los Pregones, near Tasco, in the district of the mines of the Doctor, and in the valley of Tenochitlan, to the south of Gassavé, in the road from Mexico to Pachuca. The works carried on for the discovery of these different mineral repositories have been so frequently interrupted, and they have been conducted with so little zeal, and, generally, with so little intelligence, that it would be very imprudent to advance, as has been often done, that the mer-

cury mines of New Spain are not worth the working. It appears, on the contrary, from the interesting information of M. Chovel, that the veins of San Juan de la Chica, as well as those of the Rancon del Centeno and the Gigante, are very deserving of the attention of the Mexican miners.

Was it to be expected that superficial works, which were merely begun, should, in the very first years, yield a net profit to the shareholders?

The mercury mines are of very different formation, some are found in beds, in secondary rocks, and others in veins, which traverse trap porphyries. At Durasno, between Terra Nueva and San Luis de la Paz, cinnabar, mixed with a number of globules of native mercury, forms a horizontal bed, which rests on porphyry.

COALS.

This *Manto*, or bed, which has been pierced by pits of 16 or 19 feet deep, is covered with beds of slate-clay, which contains fossil wood, and coals. On examining the roof of the *Manto*, we find from the surface, first, a bed of slate-

clay, impregnated with nitrate of potash, and containing fragments of petrified vegetable. Then a stratum of slate-coals, of three feet in thickness; and, lastly, slate-clay, which immediately covers the ore of cinnabar. From this mine there was drawn, eight years ago, in a very few months, nearly 700 quintals of mercury, which were not sufficient to pay the expense of working, although the ore contained 1lb. of mercury for every load of three quintals and a half.

CINNABAR.

The cinnabar vein of San Juan de la Chica is two or three, and even sometimes six metres in width. It traverses the mountains of *los Calzones*, and extends to Chichindara. Its ores are extremely rich, but by no means abundant; the mine of Chica had only been wrought to the depth of 164 feet in 1803, and it is found (and this geological fact is remarkable) not in loadstone or slate, but in true *pitchstone porphyry*; divided into balls with concentric layers, of which the interior is lined with mammilated hyalite. The cinnabar, and a little native mercury, are

sometimes observed in the middle of the porphyritic rock, at a very considerable distance from the vein. In 1803 only two mercury mines were wrought in all Mexico ; those of *Homo de Torr*, near *San Juan de la Chica*, and *Neustra Senora de los Dolores*, a quarter of a league to the south-east of *Gigante*.

Cinnabar is also to be found in the mines of *Chilapan*.

In the first of the mines a load of ore yields from two to three pounds of mercury, and the expences of working are very moderate. The mine of *Gigante*, from which there is even drawn six pounds of mercury per load (carga) of ore, furnished from 70 to 80 pounds weekly, and it is wrought on account of a rich individual, Don Jose del Maso, who has the merit of having first excited his countrymen, during the last war, to the working of the quicksilver mines and the manufacture of steel.

TIN AND HORNSTONE.

The cinnabar extracted from the veins of the mountain *del Fraile*, near the *Villa de San Felipe*,

occurs in a porphyry with base of hornstone, which being traversed by veins of tin, is, undoubtedly, more antient than the pitchstone porphyry of *Chica*.

LEAD

Abounds in the mountains of *calcareous* formation, contained in the north-east part of New Spain, especially in the district of Zimapan, near the Real del Cardonal and Lomo del Toro, in the kingdom of New Leon near Lenares, and in the provinces of New Santander, near St. Nicholas Croix; the lead mines are not wrought with much spirit.

LEAD AND TIN

Are found in the veins of Hacho (Tasco, to the north of Chilpansengo) Izmiquilpan.

TIN

Is also found in veins of tin, at Sierra de Guanaxuato. It is obtained by means of washing from the alluvial soil of the intendancy of Guanaxuato, near Gigante, San Felipe, Roble-

dal, and San Miguel el Grande, as well as in the intendancy of Zacatecas, between the towns of Zeres and Villa Neuva. One of the ores most common is the wood tin, of the English mineralogist. It appears that this mineral is originally found in veins, which traverse trap porphyries, but the natives instead of working those veins, prefer extracting tin from the earth, brought down the ravins. The intendancy of Guanaxuato, in 1802, produced nearly 9200 arobas of copper, and 400 of tin.*

IRON.

The iron mines are more abundant than is generally believed, in the intendancies of Valladolid, Zacatecas, and Gaudalaxara; and especially in the *provincias internas*. They are only worked with any degree of spirit during a period of maritime war, when a stop is put to the importation of steel and iron from Europe,

The veins of Tecalitan, near Colima, were

* 25lbs. Spanish.

successfully wrought and afterwards abandoned. Fibrous magnetic iron ore is found in conjunction with magnetic iron pyrites in veins, which traverse gneiss, in the kingdom of Oaxaca.

The western slope of the mountains of Mecho-
achan abounds in ores of compact iron-stone,
and brown hematite. The Cerro del Mercado,
situated near the town of Durango, contains an
enormous depôt of ores, of brown, magnetic, and
micaceous iron.

ZINC.

Amongst the metals, of which the use is the
most limited, is zinc; it is found under the
form of brown and black blende, in the veins of
Ramos, Sombrerete, Zacatecas, and Tasco.

ANTIMONY

Is common to Catorce and los Pozuelos, near
Cuencama.

ARSENIC

Is found amongst the minerals of Zimapan,
combined with sulphur as orpiment.

COBALT

Has never yet been discovered amongst the minerals of New Spain.

MANGANESE

Has been discovered in Cuba.

WORKING OF THE MINES.

It is of great importance to the mines of Mexico, that, unlike those of South America, they are found in regions of moderate elevation and temperature. The greater portion of the most valuable are at the height of from 6,000 to 10,000 feet above the level of the ocean, and, consequently, exempt from that severity of cold which is found so injurious in Peru. In consequence of the country round the mines being thus in healthy and fruitful elevations, the great number of labourers which they require easily find subsistence; and, whenever an extensive

mine flourishes, the concourse of people which it collects creates a market for food, to supply which, the uncultivated fields around them are brought to afford the requisite supplies; and towns spring up, and land becomes fruitful where, a few years before, only uncultivated deserts were to be seen. It is from the healthiness of the climate in which the mines are situated, and from the fertility of the land around them, that Mexico has been enabled to extract so great a quantity of mineral wealth, rather than to the richness of the ore, or to the accessibility of the veins. The mines of silver at Obergerge, in Saxony, which are by no means excessively beneficial to the proprietors, will show how much the value of the mines of Mexico depend on the cheapness of labour, arising from the ease with which subsistence is obtained in a fruitful country. In each quintal of the Saxon ore that is extracted, they have commonly found ten ounces of silver; and, in fortunate periods, it has averaged fifteen ounces. The mean produce of the mine of Guanaxuato is four ounces in each quin-

tal of ore. In other mines, the produce is from two to three ounces per quintal, and in few does it exceed five. The average is calculated by Humboldt at between three and four ounces. The mines of Mexico are much deeper than those of Saxony. Valenciana has a shaft of 1680 feet from whence to bring up the ore, whereas the richest of the Saxon mines, Himmelsfürst, is only 1100 feet in depth. The fruitfulness of the country around the mines is not the sole cause of their superiority, for though, as we have seen, the ore is by no means rich, yet the breadth of the veins in which it is found is highly favourable to the facility of raising it. A mine in Saxony, where the vein is six feet in extent, is considered as a prodigy, but the (*veta madre*), mother vein of Guanaxuato, is from 130 to 145 feet in extent. The Saxon mine has been worked in length about 700 yards, whilst the broader one in Mexico has proceeded already to double that distance. The extent and length of other veins are of the same extraordinary dimensions, and the smaller veins, which in Europe would

be worked, are left in total neglect. The use of machinery to diminish animal labour is but feebly adopted, and the execution of those few machines they construct is so bad, that they are scarcely of any benefit. As the ore is brought from the mine on the backs of men, it is necessary that the descent should be made very capacious. That of the mine Valenciana is 1680 feet in perpendicular depth, and 90 feet in circumference. This pit is dug in the solid rock, it is beautifully walled, and, when completed, having cost a million dollars, may be considered one of the greatest and boldest undertakings in the history even of Mexican mining. This mine has the peculiar property of being free from water, a circumstance of vast importance, since other mines, equally rich, have been abandoned, because the proprietors have not been enabled to exclude the water, where the steam-engine is not yet adopted. In the year 1760, the country around this mine was a perfect desert. M. Obregon, a Spaniard, with a vehement passion for mining, with a small capital, but with the

confidence of richer men who assisted him, began to excavate. In 1766, though he had got to the depth of 260 feet, the value of the produce was less than the current expences. He entered into partnership with a small trader, named Otero, who had some ready money. They continued to pursue their operations, with confidence in the result, till, in 1771, they came to masses of sulphuretted silver, mixed with native and red silver. From 1771 to 1804, the mine has constantly yielded a gross produce of £583,000 sterling; and, in some of the most profitable years, the two proprietors have each shared the enormous sum of £250,000. The spot where these operations commenced was occupied by a few wild goats, and in ten years it became a considerable town, with seven or eight thousand inhabitants, surrounded with cultivated and highly productive fields. As the miners have gone deeper for the ore, the expences of raising it have been increased; but the quality has so improved, that the net profit to the proprietors has continued the same. The expence of work-

ing this mine amounts annually to £190,000 sterling; three-fourths of which are for wages to the labourers, and the remainder for gunpowder, steel, iron, wood, leather, and tools of various kinds. The cost of powder for blasting the rocks amounts to £16,000 annually. The number of individuals employed is about 3000. The principal manager receives a salary of £2,500, and has under him several overseers, and nine master-miners. These head men visit daily the subterraneous operations, on the backs of men, who have a kind of saddle for the purpose, and are called little horses (*cavalitos*).

The whole of the labour of the mines is performed by freemen; no slaves or convicts are employed; and the stories circulated in Europe of criminals and smugglers being condemned to labour in the mines are totally without foundation. The labour, though voluntary, is very severe, and the people are stimulated to perform it only by being paid, not by the time occupied, but by the quantity of work that is performed. The ore is carried solely by men, who are so

accustomed to this kind of labour that they remain with a load from 240 to 370 pounds on their backs, six hours at a time, during which they ascend many thousand steps in the pits, in a temperature from 71° to 77° of Fahrenheit. They proceed in files of fifty or sixty, among whom are some boys of ten or twelve years old, and some men more than sixty, each of them loaded according to his own estimation of his strength. In ascending the stairs they throw the body forward, and support themselves with a staff about a foot long. They walk in a ziz-zag direction, having found, by experience, that their respiration is thereby less impeded. The muscular strength acquired by these men must be prodigious, since, without any burden, a person not accustomed to it feels intolerably fatigued from ascending and descending so many thousand steps. The weight of each load is agreed on before the ascent is begun; regular registers of the quantity carried by each individual is entered by accountants; and the quantity of ore brought from the mine is easily ascertained to the satis-

faction of all parties. Each digger of ore is calculated to loosen as much from the vein as three of the porters can carry away. This operation is performed with a kind of iron crow, with a sharpened steel point, that requires perpetual repointing; for which purpose small moveable forges are placed in various parts of the mines. Though the workmen are almost naked, and are closely watched and carefully searched, they sometimes contrive to embezzle considerable portions of the richest minerals, by concealing them in their hair, under their arms, and other parts of the body. These thefts are often detected, and a register is kept of what is thus seized from the depredators. In the mine of Valenciana it amounted, in fourteen years, to the value of £36,000 sterling.

Though the mine of Valenciana has produced the most uniform profit to its owners, that of Sombrete, in the intendency of Zaccatecas, has produced the largest profit in a short period. A portion of this mine, called (*veta negra*) the black vein, yielded to its proprietors, the family

of the Marquis del Apartado, upwards of £800,000 sterling within six months; and, though nothing approaching to that profit has since been gained, it still holds its rank among the mines of the first class. The mines of Catorce have been begun but recently to be excavated. This district was first explored by an accurate and adventurous miner, in 1778. He was fortunate enough, at the first trial, to hit on what is called the great vein (*veta grande*), and in a very short time gained more than half a million dollars by it. The great riches of the vein, however, were not developed till it had been carried 350 feet down, whence, to the depth of 550 feet, they found the metals called *colorades*, a mixture of silver and gold, and abundance of native silver. At that period the expence of working scarcely exceeded 80,000 dollars, whilst the value of the metals amounted to 1,200,000. This vein is of the extraordinary breadth of 130 feet. It continued highly productive till 1798, when it had reached a depth of 1574 feet; since that time the mineral has become less valu-

able, the *metales colorados* have disappeared, and pyritous and coppery minerals are found with the silver. It is, however, still worked to considerable profit, but not to the extraordinary advantage which was yielded between 1778 and 1798.

When the ore is brought to the surface, there are two modes of separating the minerals from the substances in which they are incorporated; smelting and amalgamation. The first of these processes is so familiar, as to need no description, being nearly the same as is applied to all other minerals. It is used in Mexico in not more than one-third of the mines; and if the uncertainty of obtaining sufficient mercury was removed, and the price of that commodity properly reduced, it would be practised in still fewer, especially as the wood required for firing is becoming scarce on the ridge of the Cordilleras, the most populous of the mining countries. As the scarcity of wood increases, the abolition of the process of smelting will become an object of considerable importance to the various manu-

factories that are carried on in that district. The progress of amalgamation depends on the quantity of mercury that can be conveyed to the mines; and, has a naval war intercepts the supply, that process is necessarily greater in time of peace. In the process of amalgamation, the first step is to reduce the ore to a fine powder, which is done by well constructed mills. As the adhesion of the particles to the quicksilver depends on their fineness, this operation is more attended to than any other. The powdered ore is moistened, and in that state, called *schlich*, is carried to the court of amalgamation, an open space paved with hard flag stones. The floor is covered with the *schlich*, and levelled so as to form a heap from 60 to 90 feet in length, and about two feet in thickness. The materials for amalgamation are then added to it, and consist of muriate of soda or common salt, sulphate of iron and copper, lime and vegetable ashes. The salt is first applied, the quantity of which varies with its purity, which is very various, sometimes amounting to twenty, and sometimes to not more

than four pounds, for every quintal of the mineral paste. The mineral, thus mixed with the salt, is left for several days, till the whole of the latter is supposed to be dissolved and equally distributed. If the metal is then deemed too warm, or in a state of oxidation, and charged either with sulphates of iron and copper, which rapidly decompose in the air with muriate of silver, lime is added to cool the mass. But if the paste is thought too cold, as it will be, if it contains sulphate of lead or pyrites, which decompose with difficulty in humid air, sulphate of iron and copper are added, which are known to heat the composition. This is thought necessary, and it is only considered to be well prepared when a sensation of heat is felt by holding it in the hand. After leaving the mixture some days to repose, the mercury is begun to be incorporated with it. The quantity of mercury is fixed by the estimation made of the quantity of silver which the composition will yield, and they usually add to the mixture about six times the weight of quicksilver, which they expect will be

produced in pure silver. Shortly after the addition of the mercury, sulphate of iron and copper are administered to it again, if too cold, or lime, if too hot. During the space of three, four, or even five months, its temperature is watched, and corrected by the application of the lime, or the sulphates, as either one or the other may be required to make the mercury act on the silver. During the whole of this part of the operation, the action is favoured, and the union increased, by stirring the materials. This is usually done, by causing twenty or thirty horses, or mules, to run round for several hours, or by setting workmen to tread the mass, who go for whole days barefooted in this metallie mud. When it is known by the appearance of the mass, of which those accustomed to the process are accurate judges, that the mercury has united with all the particles of the silver contained in the mixture, the metallic muds are thrown into large vats of wood or stone. Small mills, provided with sails, placed perpendicularly, turn round in those vats. A stream passes through them, by which the

earthy and oxidated parts are carried away, whilst the mercury and the amalgam remain in the bottom of the vat. The amalgam remaining at the bottom of the vat is then, in some measure, discharged of the mercury, by pressing it through sacks. The amalgam is then moulded into a pyramidical form, and, in that state, goes through the process of distillation, by which the remainder of the mercury is evaporated, afterwards condensed, and preserved for future use. In this process, however, a loss of mercury is suffered, generally from an ounce and a half to an ounce and three quarters for each ounce of silver that is produced. Our business here is to describe the process, not to point out its errors, or to show that the same effect might be produced in a less expensive, and far more expeditious manner. Among so many thousand mines, the owners of which are the most independent of mankind, there are to be found many deviations from this mode of amalgamation, but we have described that mostly followed, without examining, with chemical criticism, the effect

which would be produced if the mass of *schlich* was placed in a court paved with iron and copper instead of stone, or if the process of stirring would be more beneficially performed with ploughs of iron or copper, than by the feet of horses, mules, or men. This has been urged in Mexico, and will probably be adopted as soon as the benefit of it is clearly understood. The method of amalgamation has been the cause of the increase of the Mexican mines. By it, all the silver in the ore may be extracted from it, and now the residuum, which, under the former process, used to be thrown away as of no value, is made to produce a quantity of silver, that amply repays the expence of collecting it.

Since this mode has been adopted, the consideration of the quantity of mercury that can be procured becomes of vast importance. The present consumption of Mexico requires a supply of 16,000 quintals, which, in time of peace, is supplied from Europe. The mine of Almaden, in Spain, would have furnished this quantity, but for an inundation, which, for want of timely

attention, destroyed the works. The mine of Huancavelica, from similar carelessness, had ceased to be worked, or produced but little. In these circumstances, the court of Madrid made a contract with the Austrian government, for a supply to be furnished from the mines of Istria. The mercury from Germany either was, or was supposed to be, less pure than that of Almaden. The government of Spain have unwisely made quicksilver the subject of a royal monopoly, and an article of revenue. The price is thus raised, and the supply uncertain. Intrigues are carried on by the miners at the viceroyal court of Mexico, either to obtain a large quantity, or a greater proportion of Spanish than German quicksilver; and these smaller proprietors, who either have no access to the court, or have no means of creating an influence there, are compelled to be satisfied with a small portion, and that portion what is deemed of the inferior quality. The power of the viceroy to distribute quicksilver whenever it has been scarce, has been the means of great oppression on many

miners, and a source of wealth, scandalously enormous, to the viceroys. The price at which the court of Madrid supplies its provinces with quicksilver is of vast importance, both to their and her own prosperity; whereas the revenue drawn from the monopoly is impolitic in its principle, corrupt in its practice, and small in its amount. The court has, indeed, gradually reduced the monopoly price from 82 to 41 dollars the quintal; a price, perhaps, as low as the consumers could obtain it on an average of years, if a competition was permitted. The great evil now arises from the favouritism by which the interests of the small proprietors are sacrificed to those of the greater. It is also no inconsiderable evil, that a supply proceeding from only one source, and that not the most unexceptionable, must be very uncertain, and often very scanty. In New Spain, the indications of mercury are very visible. Cinnabar is found in many parts, and sulphureted mercury in others; but these mines have engaged little attention, and the monopoly of the government has

acted as a bar to their being effectually investigated.

Although the mines of Mexico are all of them the property of individuals, or of voluntary partnerships, yet they have a bond of union in a tribunal or corporation, which makes laws to regulate the rights created by the mining system, and (though they can only recommend) to institute improvements in the various processes. When, at the early period of the occupation of Mexico, the Spaniards first began their mining operations, a mixture of laws, some Spanish, some German, and some Flemish, emanated from the court of the Emperor Charles the Fifth. Their contradictory nature induced the proprietors of mines to form a board, which at first was a voluntary union, but has since been recognized as a legal corporation, endowed with considerable revenues, and invested with extensive authority. The board called *Tribunal General de la Minería de Nueva España* is composed of a director, two deputies from the provincial councils of miners, an assessor, two consultors,

and a judge. They are chosen by the thirty-seven provincial councils of the miners, and have two deputies constantly residing at Madrid, to protect their interests at the seat of government. They direct the studies in the College of the Mines, and select from thence students, who are sent for the purpose of communicating instruction to the chief towns in the mining districts. The influence of these students is, however, confined; they have no power to direct the most beneficial processes; and the jealousy of the miners regarding their liberty prevents the full benefit which might be derived from this diffusion of men of scientific acquirements. The institution of the tribunal, especially under the organization it has received within the last forty years, has been of great benefit to the proprietors of mines. It has preserved a degree of public spirit, disseminated the knowledge of new facts and improvements, and created a community of feeling among all those connected with the important affairs of the mines. This board is endowed with an annual income of more than £40,000 sterling, arising

from the signorage which is divided between it and the crown, on all the gold and silver coined at the royal mints. The revenue was designed to support the School of Mines, and to be lent out to feeble proprietors, to assist their operations. It has been useful, to some extent, in both ways ; but the court of Madrid, in the state of poverty which has compelled it to lay its grasp on money wherever it could be found, has extorted, under pretence of a gratuity and a loan, near £700,000, which has absorbed more than its accumulation, and now one-half of its revenue is destined to pay the interest of money which has been borrowed to lend to the government.

The taxes levied on the mines are weighty, and produce a revenue, which, though much evaded, is still very large. Formerly the king received a fifth of the produce of all mines, and though this tax has been reduced to half that proportion, it still retains its ancient name *el quinto*. The quinto is now 10 *per cent.* ; another duty called the 1 *per cent.* is added ; besides

which, for coinage and seniorage, including the share of the tribunal of mines, $2\frac{1}{2}$ *per cent.* is paid ; making together a charge on the proprietors of $13\frac{1}{2}$ *per cent.* on the amount of the gold or silver that is extracted. Considerable intricacy exists on this subject. When the minerals contain, as they frequently do, a mixture of gold and silver, this gives rise to endless discussions, and opens a field for oppression, for bribery, for chicane and corruption, which ultimately tends to enrich the larger proprietors in some degree, and the officers of the revenue in a much greater.

Besides the more precious metals, gold and silver, which we have thus far exclusively viewed, Mexico abounds in the other mineral riches, which equally contribute to the improvement and enjoyments of man in the social state. Iron is found in great abundance in the intendancies of Valladolid, Zaccatecas, and Guadalajara, and especially in the more northern provinces. The increased production of these mines is always suspended by a return of peace, however much they may have yielded in the preceding

periods of war. The difference in price in war and peace, both in iron and steel, is enormous. The former has sometimes risen from 20 to 240 the quintal; and the latter, which commonly in peace was sold for £3, has been known in war to be worth £50. During the early part of the wars occasioned by the French Revolution, the tribunal of mines advanced money to the iron miners, but the works were suspended by the peace of Amiens. When war recommenced, these mines were resumed, but very imperfectly, and the tribunal having lent its capital to the government, could offer them no assistance.

Copper is found in a native state in the intendancy of Valladolid, and some in Guanaxuato. Tin is found in mines, but is principally extracted from the earth washed down in the deep ravines. A combination of these two metals, both of which were known to the ancient Mexicans, though they had not discovered iron, was used to form their tools and weapons. By an examination of one of their implements by some French chemists, it was ascertained that they had the art of tem-

pering these two metals, so as to render them equal in effective utility to iron, or even to steel. Lead is found, but the mines are very little worked. Zinc is found under the form of a brown and black *blende*, in several veins. Antimony is produced in Catorce; arsenic, combined with sulphur, has been extracted from the minerals found in Zimapan. Neither cobalt nor manganese has yet been discovered in Mexico; and both these minerals, though the latter has been discovered in Cuba, appear to be less abundant in the equinoctial regions of America than in the temperate climates of the ancient continent. To complete our view of the minerals of New Spain, it is necessary to state, that coal mines have been discovered in several parts of the northern provinces, and one is slightly worked near the sources of Rio Sabina. Rock salt is also found in many parts; and, if necessary, more might be obtained. It is principally required for the process of amalgamation in the silver mines, as the Indians scarcely use it with their food, but adhere to their ancient practice of applying the Chili as the sole condiment to it.

REDUCTION OF ORES.

Upon reviewing the methods practised in Mexico for reducing the silver ore, as well as those for obtaining them from the mine, it will be obvious to persons conversant in metallurgy, that the processes employed may, in many instances, be much simplified and improved, and in others totally abolished.

In the first place, with regard to the use of machinery, and the practice of the science of mining, Geometry ; incalculable labour may be saved, and expedition used, by persons who have the advantage of the one and a knowledge of the other. At present, Mexico is destitute of both these aids. The mine of Valenciana was inundated, by the miners not having a knowledge of geometry—they worked into an old shaft of an adjoining mine, which was filled with water ; when the division betwixt the two gave way, the water rushed in with such impetuosity, that most of the miners, unable to escape, were drowned.

The mines of Saxony, Germany, and Sweden, as well as those in Cornwall, are worked with a combination of great skill and chemical knowledge, which, if similarly exerted in Mexico, would certainly quintuple the annual product of the mine, and diminish the expence of working in nearly a similar proportion.

A general opinion now prevails, with persons uninformed on the subject, that, in consequence of the establishments now fitting out for the Mexican mines, Europe will be inundated with gold and silver in a *very short* period ; but no such ideas are likely to be realized. Some years must elapse before the machinery necessary for proceeding, upon a large scale, can be fixed and put into general action ; and though much may be expected, and will doubtless be effected, it must be remembered, that if the *general* system of mining has been carried on in a very imperfect and erroneous manner, *particular* mines have been differently conducted, and those have yielded *one-fourth part* of all the precious metals which Mexico has produced.

The process of amalgamation was, doubtless, a happy introduction, in very many instances, for separating the silver from its ores; but this, like all other popular remedies, has its abuses; and, from the ignorance of its proper application, has ruined those who, had they known when to reject it, would have made rapid fortunes. In Mexico, the general defect in the management of the process of amalgamation, has been the excess of mercury employed, the immense time and labour spent in effecting a combination of the silver from the ore with the muriatic acid of the common salt, which was done by men trampling barefooted on the mass for several months together.

In Saxony (where mercury is cheap,) this combination is readily effected by the aid of rotary machinery; and that identical process, which, in Mexico, consumes so many months of incessant labour, is there effected in a single week: immense advantage will, therefore, be derived from a similar process in America.

In Mexico, it often happens that in two mines,

not far distant from each other, producing the same ore, and in the same local situation, amalgamation is used in one and smelting in the other. Where fuel is abundant, and carbonate of soda so plentiful as it is in Mexico, and mercury at the same time so expensive, the smelting process, when scientifically managed, will present a powerful superiority.

It will not fail to excite surprise in the mind, that in a country where mining speculations have been for many centuries the ruling passion, and when mineral wealth is distributed in such abundance, that it should have recourse to Europe for those most precious of all things to them—mercury and iron.

Iron ores are there as common as in most other regions, and mercury is no where disseminated with a more lavish hand; yet, extraordinary as it may appear, during the European wars, when the supply of those commodities was cut off, the whole of the mines (except in one or two instances) ceased to be worked for want of them.

Scarcity of fuel has been adduced as the great obstacle to the manufacture of iron in the distillation of mercury; but the silver mines of the province of Guanaxuato, are subject to no such preventive to the smelting process, where wood is a natural product of the spot, and carbonate of soda may be procured as a flux from the Lake of Tescuco.

However great may have been the difficulties which the want of fuel has created, the policy of the Spanish government, in teaching the Americans to look to Europe for their manufactures, has been a much greater impediment to the production of iron and mercury from the native soil; for it must be evident, to the most superficial observer, that where *mercury*, *coals*, and *iron* are to be found in the same formation, there can be no insurmountable obstruction to extracting them with advantage.

REVENUES.

Mexico, unlike the colonies of the other European nations, not only produced a revenue

adequate to the expence of its own government, but a surplus to assist the mother-country. The taxes levied on the mines are the most productive; these have been before described, and amount, on an average of years, to

3,516,000 dollars.

Net profit of the mints, 1,500,000

Profit on the sale of mercury, 536,000

5,552,000

The monopoly of tobacco, after deducting the expence of the cost of the leaf tobacco, is 594,000 dollars; and that of manufacturing it into snuff and segars, which is 1,285,000 dollars, produces 4,500,000 dollars. The alcavala, or duty on sales, from which the Indians are exempted, produces net about 3,000,000. The Indian capitation-tax yields 1,300,000. The duty on the fermented liquor made from the Agava, called Pulque, produces 800,000. The Almoharifazgo, or duties on foreign trade, is 500,000. There are some other articles, which we shall also enumerate.

Net Revenue of New Spain.

Tax on minerals, profit on coining and				
mercury	-	-	-	5,552,000
Monopoly of tobacco	-	-	-	4,500,000
Alcavala	-	-	-	3,000,000
Indian tribute, or capitation-tax	-			1,300,000
Duty on pulque	-	-	-	800,000
Almoharifazgo, or tax on foreign com-				} 500,000
merce	-	-	-	
Monopoly of cock-fighting	-	-		45,000
Ditto of snow	-	-	-	60,000
Profit on Papal indulgencies			-	270,000
Post-office	-	-	-	250,000
Monopoly of gunpowder	-		-	150,000
Clerical first-fruits	-	-	-	100,000
Profit on playing cards and stamped				} 200,000
paper	-	-	-	
Dollars,	-		-	<u>16,727,000</u>

By some accounts, it appears, that, when the gross revenue of New Spain amounted to 20,000,000, the expences of collecting it were

more than 6,000,000, and, consequently, the net sum paid into the treasury was less than 14,000,000.

ARMED FORCE.

An army is constantly kept up in Mexico of about 10,000 regular troops, who are recruited, disciplined, and regimented, within the kingdom. Of these, about 6000 are in Mexico Proper, and the remainder on the various stations on the northern frontier, or in the *provincias internas*. Of the former, 1000 are cavalry, 150 artillery, and the remainder infantry. The regular troops on the frontier provinces are mostly light troops, with some flying artillery. Besides these regulars, called *tropas veteranas*, a body of militia (*milicias provinciales*) of 22,200 men, is constantly maintained ; of these, 11,000 are infantry, and the same number of cavalry. The Indians, on the banks of the Rio del Norte, carry on a constant war with the Spaniards. The troops on that frontier are, in consequence, in a state of perpetual activity. They are all natives of the

country. They are tall and robust mountaineers, admirably mounted, and equally accustomed to the extremes of heat and cold. They are constantly under arms, generally on horseback, and perform long marches through deserts with no other provision than a little ground maize, which they mix at any brook with water, and thus subsist without difficulty. It is reported by those who have seen these troops, that it would be difficult to find in Europe, any cavalry of greater activity in its movements, of greater impetuosity in battle, or capable of enduring greater privations.

CHURCH.

Although the religious establishment in Spain is most profusely endowed, that example has not been followed in Mexico to so considerable an extent. The numbers of the clergy bear a proportion nearer to the Protestant than to the Catholic countries of Europe. The Archbishop of Mexico is the metropolitan, and has under

him eight bishops, the differences in whose revenues are very striking.

Bishops, and their Revenues.

	Dollars.
Archbishop of Mexico . . .	130,000
Bishop of La Puebla . . .	110,000
————— Valladolid . . .	100,000
————— Guadalajara . . .	90,000
————— Durango . . .	35,000
————— Monterey . . .	80,000
————— Yucatan . . .	20,000
————— Oaxaca . . .	18,000
————— Sonora . . .	6,000

The inequality of income seen in the bishopricks extends also to the curas or parochial clergy, some of whom have incomes amounting to 15,000 dollars, whilst others have scarcely 100. The religious houses are in many instances rich, but not from their possessions in land, so much as from their accumulations, which have been improved by lending on mortgages to the proprietors of lands at high interest. The

revenues of the church being derived almost solely from land, in the form of tythes, have partaken of that advance which the increase of cultivation has produced. The difference in the value of tithes taken at two following periods, will show both the increase in cultivation, and in the revenues of the church. Produce of tithes from 1771 to 1780, 13,357,157 dollars,—from 1781 to 1790, 18,353,821 dollars.

The proportion between the regular and secular clergy is not ascertained, but the whole of the religious of both orders, including nuns, monks, lay brothers, probationers, choristers, and servants, do not exceed 14,000 persons.

INTENDANCIES AND PROVINCES.

The political division of New Spain is into twelve intendancies, to which may be added three provinces, which, though under its government, are removed to a considerable distance, and are rather dependant upon it, because no other plan of ruling them has yet been adopted, than from any design that they should ultimately

be considered a part of it. The intendancies are,

Mexico	Oaxaca
Puebla	Merida
Guanaxuato	Vera Cruz
Valladolid	San Luis Potosi
Guadalaxara	Durango
Zaccatecas	Sonora.

After a sketch of these, the provinces of New Mexico, Old California, and New California, will be noticed.

INTENDANCY OF MEXICO.

The intendancy of Mexico merits the first consideration, on account of its being the most populous, the most rich, and as containing the capital of the kingdom, and the seat of the government. Its extent is 5927 square leagues, and its inhabitants, by the census of 1803, amounted to 1,511,800. It extends from $16^{\circ} 34'$ to $21^{\circ} 57'$ of north latitude. On its western side, a portion of the province is washed by the South Sea, from Acapulco to Zacatula, a distance

of 270 miles, but no part of it approaches nearer than 35 miles to the Eastern Ocean. The intendency being both on the high and the low land, must partake of the climate of each, but more than two-thirds of it is mountainous, and, consequently, cool and healthy; whilst that part which borders on the South Sea, has all the heat and insalubrity usually encountered in similar circumstances. Only the highest peak of one of its mountains enters the region of perpetual snow; and no other summit but this of Toluca, is equal in height to Mont Blanc in Switzerland. The best and most valuable portion of the intendency is the Valley of Mexico, which is called a valley, because surrounded by ridges of higher hills, but is yet 7500 feet above the level of the ocean. The drains of the hills around the plain run towards the city, in the vicinity of which, they form the lakes of Tezcucó, Zumpango, San Christoval, Xochimilco, and Chalco. Tezcucó, from the muriate and carbonate of soda in the soil, is brackish; the other lakes are of good tasted water, and all are abundantly stocked.

with fish. These lakes have gradually been drying up, ever since the country has been occupied by the Spaniards. The great quantity of trees which have been cut down for building, whilst none have been planted, has exposed both the soil and the lakes to a greater degree of evaporation, as well by a greater surface on which the direct rays of the sun operate, as by laying them open to the influence of the drying winds from the south. Artificial means have been also applied to a most expensive, if not an effectual extent, for draining the Lake of Tezcuco, and preventing it from inundating the capital, as it has sometimes done in a most injurious degree. Operations have been carrying on for near three hundred years to prevent these inundations, by turning the Lake of Zumpango into a stream, that shall empty itself by the River Tula to the Gulf of Mexico. The labour, and even the lives, of numberless Indians have been lavished on this undertaking, and the expenditure has already amounted to £2,000,000 sterling. It is a canal of most stupendous

dimensions ; but, from the friable nature of the soil through which it is conducted, from frequent variations in the design, and numerous errors in the execution, it does not yet operate as an effectual security, or insure the inhabitants from these fatal inundations, by which, at several periods, they have been visited. The lakes, in the immediate vicinity of the capital, are made to supply considerable quantities of vegetables and fruits, by means of floating gardens ; an invention of more importance, when the city was almost covered, and wholly surrounded with water, than at present ; but which has, however, been continued by the Indian families to the present time, and furnishes the means of subsistence to many of them. These gardens (*cinampas*) are formed of reeds, rushes, roots, and branches of brushwood, which are converted into raft ; on these materials is laid the black mould which is strongly impregnated with muria of soda. The soil is gradually purified from the salt, by frequently washing it with the water of the lake. Even the water of Tezcucó,

which, though salt, is not highly saturated, has the effect of dissolving the salt in the soil, and by each washing, the fertility is increased. Some of these gardens contain the cottage of the proprietor, on which he guards a group of surrounding chinampas. They are towed or pushed by long poles from one part of the lake to the other, and, in process of time, as the lakes have subsided near the banks, these gardens have become fixed, and at length, by farther fall of the water, have become dry ground. Each chinampa is about 330 feet long, and 20 broad. The mould, purified by frequent irrigations, is heaped to the height of three or four feet above the surface of the water. Beans, peas, capscums, potatoes, artichokes, cauliflowers, and other vegetables, are cultivated upon them; the borders are generally ornamented with flowers, and sometimes a hedge of rose bushes is planted as a fence around them. One of the most agreeable recreations of the inhabitants of the city is taking the air in boats among these delicious floating gardens.

CITY OF MEXICO.

The city of Mexico, the most extensive, populous, and wealthy of any place in the western hemisphere, is built on what was formerly a lake, and is still a marshy soil, between the two lakes of Tezcuco and Xochimilco. The centre of the city is distant from the former two miles and six furlongs, and from the latter five miles and a half. It equals in regularity of buildings, in equality of surface, and in the breadth of its streets, St. Petersburg, Berlin, or the best parts of Westminster. The houses are built of stone, with flat roofs, and generally display considerable architectural taste. The public buildings are magnificent, and have been constructed at enormous expence. The most considerable of these is the Vice-regal Palace, an extensive but heavy edifice; the Cathedral, a magnificent building, whose execution occupied ninety years, and which is most profusely adorned with gold and silver images, rails and lamps of solid silver,

and other decorations of the same expensive character. There are near one hundred other churches, which are for the most part ornamented and decorated with the same lavish profusion. The Royal Mint is a splendid building, and one hundred workmen are constantly employed in it. The edifice destined for the School of Mines cost in building £125,000, and would be thought an ornament to the best parts of Paris or London. The Plaza Major is adorned with a beautiful equestrian statue of King Charles the Fourth, cast in bronze in this city by a native artist. It is considered a *chef d'œuvre* of art, and its weight, which is twenty-two tons, must have employed mechanical talents of no common order to place it on the pedestal which supports it. The Treasury near the Viceroy's palace is more remarkable for having been the spot from whence have issued more than one thousand five hundred millions of dollars, than for any peculiar beauty or taste in the edifice. There are many Convents in the city; the principal one, that of the Franciscans, is of great extent, and possesses

a large revenue. There are several Nunneries, the principal part of whose inhabitants are the females of the higher Indian families, and some few of the white Creoles.

STATE OF SCIENCE AND LEARNING.

Education is not totally neglected, though it is rather at a low ebb. The University is a richly-endowed establishment, and has abundance of professors, canons, and the other offices which might be usefully employed. The mathematics, chemistry, and botany, are more studied than the classics, but scholastic divinity is the most favourite pursuit, in an institution whose principal design it is to qualify youth for the clerical profession. The study of mineralogy is prosecuted with ardour in the school for that science. A botanical garden is established, very richly furnished with the rarest specimens of those plants which are interesting either to commerce or medicine. An Academy for the Fine Arts, furnished with a good collection of ancient casts, has been useful in fostering a

correct taste, which has been displayed in the equestrian statue already noticed, and in a beautiful sepulchral monument consecrated to Cortez by his descendant the Duke of Monteleon, which was constructed by Tolsa, and stands in the chapel of the hospital *de los naturales*. Instruction in the fine arts is communicated *gratis*, and for this purpose an annual revenue of more than £5,000 is appropriated. The building assigned to it contains a much finer assemblage of casts than is to be found in any city of Germany. Casts of the Apollo Belvedere, Laocoon, and other large statues, have been transported over the worst roads, and over higher mountains than St. Gothard or St. Bernard. The casts were purchased in Europe at an expence of more than £8,000, exclusive of the cost of conveyance. The Academy has laboured successfully to introduce among the artisans a taste for elegant and beautiful forms. Every evening the large rooms of the building, well lighted with Argand's lamps, are filled with hundreds of young people, some of whom are occupied in drawing from

relievos or living models, and others in copying drawings of various kinds ; and in this assemblage the distinctions of rank depending on complexion seem to be waived, as the Whites, the Indians, and the Mestizoes, meet on equal terms, and enjoy equal advantages of instruction.

The knowledge of chemistry is very generally diffused throughout Mexico ; it is called the *nueva filosofia*, and the natives, even in the distant provinces, are accustomed to reason on its principles and results. The best work on mineralogy in the Spanish language, *The Manuel of Oryctognosy*, according to the principles of the school of Freyberg, by M. del Rio, was published in Mexico, as well as the first translation of Lavoisier's *Elements of Chemistry*. The School of Mines possesses a chemical laboratory, a geological collection arranged according to the system of Werner, a physical cabinet furnished with the instruments of Ramsden, Adams, Le Noir, and Berthoud, and also models executed with great accuracy by native artisans. The court of

Spain has sedulously promoted botanical researches in each portion of its extensive transatlantic dominions. The botanical garden in Mexico exhibits specimens of these expeditions. One of the commissioners for New Spain, M. Sesse, after returning from the expedition, and arranging his collection, delivered a course of botanical lectures, which were continued by M. Cervantes, whilst M. Echeveria described the extraordinary beasts, birds, and fishes, which the country produces. These gentlemen were both of them natives of Mexico.

Mathematical knowledge, though not neglected, is less assiduously cultivated in the University of Mexico than in the School of Mines. The pupils of this last institution proceed farther in analysis, and are instructed in the integral and differential calculus. As the return of peace has supplied them with chronometers, sextants, and repeating circles, we may hope for accurate observations from the most remote provinces of the viceroyalty. The taste for astronomy is of ancient date in Mexico. It had three distia-

guished cultivators in the last century.—Velasquez, Gama, and Alzate. They made a number of observations, especially on the eclipses of Jupiter's satellites. Alzate was the correspondent of the *Academy of Sciences in Paris* and though, from directing his attention to too many objects, he sometimes was led into error, he is entitled to great praise for having excited among his countrymen a taste for science, and a love of research, and for having diffused a considerable portion of physical knowledge by the *Gazetta de Literatura*, which, for a long series of years, he edited.

Don Joaquin Velasquez was the most able geometrician that has been produced in New Spain, and all his geodetical and astronomical labours bear the stamp of the greatest accuracy. He was born in July 1732, at an obscure Indian village. His uncle, a parish priest, placed him under an Indian of Xaltocam, who was deeply versed in the Mexican history and mythology, for his education, where he acquired a knowledge of the various languages of the indigenous

inhabitants, and perused their hieroglyphical writings. He was removed to the Tridentine College in Mexico, which then had a paucity of books, instruments, and able instructors. With such assistance as he had, however, he commenced the study of the mathematics, and was at length made happy by an accident, which placed in his hands the works of Bacon and Newton. From the one he imbibed a taste for astronomy, and from the other learnt the true method of philosophizing. Being then poor, he began jointly with his friend Guadalupe, since Professor of Mathematics in the Academy, to construct telescopes, quadrants, and other instruments. Having entered on the profession of the law, the fees he received as an advocate were destined to procure from England those instruments which his love of science made desirable. He continued his studies with much assiduity, and was at length appointed a professor in the University. In 1769, he was appointed to observe, in California, the transit of Venus, and to make other astronomical obser-

ventions. He rectified the errors in the geographical positions of various places in that country, and availed himself of its translucent and serene atmosphere, to make several celestial observations. The Abbé Chappé, from Paris, had arrived in California during his residence there, to observe the transit of Venus, and was surprised that the Mexican astronomer was found right in having ascertained that the eclipse of the moon on the 18th of June would be visible in California, contrary to his own calculation. He made by himself a very good observation of the transit of Venus over the disk of the sun, 8d June 1769, and communicated the result the same morning to Chappé, and to the two Spanish astronomers, who were his fellow-commissioners. In 1772, by a variety of observations, he fixed the latitude and longitude of the capital, and many other important places in the viceroyalty. His labours were indefatigable, and the establishment of the School of Mines, which owes its origin to him, will be a lasting monument of his zeal and ardour in the cause of science. He

died in 1786, whilst director-general of the *Tribunal de Minería*, and invested with the title of *Alcalde del Corte Honorario*.

After these notices, it would be unjust not to mention Gama. Without fortune, and with a numerous family to maintain by severe and almost mechanical labour, he was unknown during his life to his fellow-citizens, though they eulogised him after his death. Gama, by his own exertions, became an able and well-informed astronomer. He published several memoirs on eclipses of the moon, on the satellites of Jupiter, on the almanack and chronology of the ancient Mexicans, and on the climate of New Spain; all of which discover great precision of ideas, and great accuracy of observation.—It is proper to record these instances of mental proficiency, both as preserving the memory of respectable individuals, and showing that the western hemisphere is capable of producing and developing talent.

POLICE.

The Acordada, a prison and house of correction, is a very fine and extensive building. It has room for more than 1200 inhabitants, many of whom are destined to reside there, for contravening the revenue laws, and for other offences. Besides the hospital of St. Juan de Dios, which, being under the care of the monks, as in the other Spanish dominions, is not considered to receive the best medical treatment; there are several other hospitals, which receive the sick poor, and to which students in medicine are admitted, to acquire the knowledge of their profession. The streets of Mexico are well paved, with a most excellent kind of porphyry, and it is well lighted with convexed lamps. A common sewer runs through the centre of each street, which is covered with planks, and conveys the filth of the city away. A very good police is maintained, under the direction of the Cabildo, or corporation of the city. Mexico contains a

population of about 140,000, of whom nearly one-half are whites, either European or Creole, the remainder Indians, Negroes, and the various mixed casts. There are in the streets, without habitation, and almost without food or work, nearly 30,000 Indians, called Guachinangos, who resemble the Lazaroni of Naples, though, unlike them, they neither beg nor are tumultuous. As a small quantity of labour will enable them to indulge the propensity for drunkenness, they are often seen in the streets in a state of intoxicated insensibility, when they are carried to the guard-house, and, when recovered, set to work by the police. They are employed in cleansing the streets, and, in a day or two, having acquired sufficient to purchase as much pulque as will intoxicate them, they are soon again in the same condition, transferred to the guard-house, and from thence to the streets, and thus pass their lives in alternate drunkenness and punishment.

As Mexico is built on a marshy soil, water is to be found everywhere, by digging a few feet, but this water is not much approved by the

inhabitants, except for washing. The principal supply is by means of aqueducts, which convey the water to the different parts of the city. The best is from the lake of Xochimilco, which is remarkably pure and limpid, and runs incessantly. Every kind of provision is cheaply and abundantly supplied from the surrounding districts, which are highly cultivated, and covered with a hardy and numerous population, whose principal occupation is the labour of agriculture. The consumption of pulque within the city is enormous ; a duty is collected at the gates, which produces annually 600,000 dollars. The consumption of bread in Mexico is, in proportion to the population, nearly the same as in the cities of Europe. Beef is less eaten than mutton ; the annual supply of oxen is only 16,000, whilst that of sheep is 273,000. Salt is made near the city. The clayey soil is impregnated with muriate of soda, which is dissolved, and, by evaporation, refined so as to fit it for culinary purposes. In regard to the supply of all necessaries, no city can be more favourably placed than Mexico, and

its local position is such as to give it a commanding influence over the whole of the American continent. It can more easily communicate both with Europe and Asia than any other capital, and nothing is wanting to augment its importance to an astonishing extent, but a free commerce, more liberal institutions, and an intercourse with some port to the northward of Vera Cruz, in a more healthy climate than that city enjoys.

The next important place to Mexico in the intendency of that name is Queretaro, a city of 35,000 inhabitants, surrounded with mines, celebrated for its beautiful houses, its aqueducts, and some manufactories of cloth. Tezcucó contains 5,000 inhabitants, who are principally employed in the manufacture of cotton goods. Chilpantzingo depends on the cultivation of wheat on the fields that surround it. The number of its inhabitants is about 7,000. Cuernavaca, on the southern declivity of the Cordilleras, is in a most delicious climate, and abounds in all the fruits of both climates, being

only 3,500 feet above the level of the sea. Cuyoacan, Tacuba, Tasco, Lerma, Toluca, Pachuca, Cadereta, and St. Juan del Rio, are the only other towns in the interior. Their population increases rapidly, and though some of them have mines in their vicinity, their principal dependance is on agriculture. The two towns on the coast of the Pacific Ocean are Acapulco and Zacatula. The inhabitants of the former amount to 4,000 usually; but, when the ships from Manilla visit the harbour, the population is generally tripled. The granite mountains, by which it is surrounded, render it very sickly; though, by a large cut through them, which has created a current of air, it is less noxious. Zacatula, though a good port, has but little trade; and, being to the northward, it enjoys a more healthy climate. The coast is very dangerous in the months of July and August, when tremendous hurricanes blow from the southwest; at that time, and even in September and October, the ports are difficult of access; and, even in the fine season, from October to May,

impetuous winds from the north-east, and north-north-east, known by the names of *papagallo* and *tehuantepec*, render the coast very hazardous. The south-west winds are attended with thunder and heavy rains, whilst the others are prevalent when the sky is clear; and what the English sailors call, in the West Indies, white squalls, are excessively dangerous.

INTENDANCY OF PUEBLA.

The intendency of Puebla contains 813,300 inhabitants, and extends over a surface of 2,696 square leagues. Its frontage towards the Pacific Ocean is 26 leagues in length, between the intendencies of Oaxaca and Mexico; but it has neither harbour nor navigable river. The greater part of the intendency is traversed by the Cordilleras. It extends through four degrees of latitude; and, though wholly in the torrid zone, from the great inequalities of its surface, possesses the productions and the climate of every part of the globe. The Table-land, which is

from 5,900 to 6,500 feet above the level of the sea, is eminently fruitful in wheat, maize, agave, and fruit-trees. It still exhibits remarkable vestiges of the ancient Mexican civilization. The highest mountain in Mexico, Pococatepetl, is in this province. It is volcanic, but for the last three centuries has only discharged smoke and ashes. It is 2000 feet higher than the highest peak of the Alps, and, with one exception, is the highest mountain of North America. The population of this district is principally concentrated on a small part of it; and almost the whole track, from the central Table-land to the shores of the South Sea, though well adapted for the cultivation of sugar, cotton, and other tropical productions, is nearly a desert. The most favourable production of the elevated plain is wheat; for a long period it made but slow progress; but, as the road towards Vera Cruz has advanced, the cultivation of this grain has increased; and, probably, at no distant period, it will become the granary for the supply not only of Cuba, Porto-Rico, and the Caraccas, but of the whole

West India settlements. The most remarkable objects now left of the ancient Mexicans are the mounds or pyramids, one of the largest of which is to be found in this intendency. Its sides are exactly in the direction of the parallels and the meridian. It is constructed of alternate layers of clay and bricks: Its height is only 177 feet, but its base is 1423 feet on each side. On the top of it is a church, on a plat-form of 45,200 square feet, in which mass is daily celebrated; by a priest of Indian extraction. This pyramid of Cholula was used, by the former inhabitants, as a temple, or rather altar, on which human victims were offered. It was in this intendency that Cortez laid his plans for the subsequent subjugation of the whole country, and where he found those assistances without which he could have made no efforts with any prospect of success. It had been long possessed by the two powerful republics of Tlascala and Cholula, the former of an aristocratic, the latter of a domestic kind. The latter had been recently subdued, and was not reconciled to the govern-

ment of Montezuma ; the former still resisted, though against fearful inequality. Cortez released Cholula from its subjection, though by the exercise of gratuitous and sanguinary cruelty ; and then, having made alliance with Tlascala, the population of both states were placed under his orders, and operated that great change which the empire of Anahuac experienced. The defection of Cholula, which was the centre of knowledge, and the arbiter of the customs and religion of the country, which was resorted to by pilgrims from all parts of it, and by that means diffused its feelings and ideas, was more injurious to Montezuma than the firm hostility which Tlascala maintained. When the power of both republics were united, under the orders of such a captain as Cortez, and directed by the knowledge and valour of Europeans, it is not wonderful that the empire of Mexico perished.

A vegetable curiosity of most extraordinary kind is to be seen in Puebla : A cyprus-tree, at the village of Atlixco, whose circumference is 76 feet four inches, and whose hollow trunk is 16

feet in diameter. 'It is unfortunate for the intendancy, that four-fifths of the land in it is in mortmain, or under Majorazgos. The greater part of it is the property of municipal, ecclesiastical, or charitable corporations, and cannot be alienated.

The principal city is Puebla de los Angeles, the most populous place of Spanish America, next to Mexico. It contains 70,000 inhabitants, by far the greater portion of whom are Indians. The municipality, by ancient privilege, is wholly of the native race, no white man being eligible. It consists of a cacique and four alcaldes, under the control of an Indian governor, who is, however, under the command of an European intendant. Cholula, the next city, now contains about 16,000 inhabitants, mostly Spaniards, or the mixed casts, who are chiefly occupied in cultivation. Tlascala has fallen from its pristine state, and is now reduced to only 3,500 inhabitants, not more than one-fourth of whom are of the original race. Thus, whilst Puebla de los Angeles, a town founded by Spaniards, is almost

wholly occupied by Indians, this place, once the seat of the most numerous and warlike population of Mexico, has become deserted by the aborigines, and the white population predominates. Atlixco, Tehuacan, Tepeaca, and Huetxotzinco, the other towns, are not populous, although the farms and mines in their vicinity maintain a considerable population.

INTENDANCY OF GUANAXUATO.

The intendancy of Guanaxuato is the smallest in New Spain ; but the density of its population, and its mineral wealth, more than compensate for its deficiency in extent. It extends over a surface of 911 square leagues, and contains 517,200 inhabitants, giving 586 souls to the league, a relative population greater than many countries of Europe, and much greater than in any other part of the Spanish dominions in the western hemisphere. Its rapid increase may be dated to have commenced about fifty or sixty years ago, when the rich mines of Marfel, Santa Ana, Santa Rosa, Valenciana, Rayas, and Mel-

lado, began to yield their immense wealth. The metallic produce of these mines far exceed the celebrated hill of Potosi, in Peru, or any other district in either continent. The riches of the mines have induced cultivation where deserts before only existed, and cities and towns have risen with astonishing celerity. No part of New Spain exceeds this in the quantity of agricultural produce, though it is all situated at a considerable elevation. Wheat and maize are beneficially cultivated, and the supply of cattle and esculent vegetables is abundant. The principal city has the same name as the intendancy, but is sometimes called Santa Fé de Guanaxuato. It is of ancient incorporation, but of recent growth, and now contains within the town 41,000 inhabitants, while 30,000 live in the mines and farms that immediately surround it. Some of the residences of the proprietors of the mines are of a degree of magnificence and taste, which would be deemed ornamental in the finest cities of Europe. The hall of the Cabildo, the churches, and convents, are beautiful, and give to this

recent city an air of grandeur and prosperity. The city of Salamanca is finely situated on the banks of the river El Grande, which runs into the lake of Chapala. Celayo and Salvatierra are cities of no great extent, but rapidly increasing, as are the towns of San Miguel, San Felipe, and Leon ; all of which are of modern foundation since the great influx of wealth from the mines.

INTENDANCY OF VALLADOLID.

The intendancy of Valladolid is 3446 square leagues in extent, and contains 376,500 inhabitants. It has a line of coast on the South Sea, about 38 leagues in length, but has no port or navigable river on the whole of its border. It is situated on the western declivity of the Cordilleras, intersected with hills and delightful valleys, which exhibit the unusual spectacle in the torrid zone of verdant and well-watered meadows. In descending to the coast, the climate is hot and the soil arid. The most singular feature in this intendancy is the Volcano de Xorullo, or Juruyo, which was formed in the night of the 20th Sep-

tember, 1759. The catastrophe in which this mountain rose in one night, to a great height, and totally changed the face of a great extent of country, is one of the most singular of which we have any recent and accurate accounts. Till the period of the combustion, the extent of ground between two brooks, called the San Pedro and the Cuitamba, was occupied by plantations of indigo and sugar canes. These two streams were bounded by basaltic mountains, the structure of which indicated that the district, at some remote period, had been subject to great volcanic convulsions. Fields, beautifully irrigated, formed the plantation of Xorullo, one of the richest and most prosperous in the whole province. In the month of June 1759, subterraneous rumbling noises were heard, and were attended with shocks of earthquakes, that, during an interval of fifty or sixty days, created terror in the cultivators. In the beginning of September, tranquillity appeared to be restored. The roaring had ceased, and the earthquakes were suspended. In the night between the 28th and 29th, the

horrid rumbling recommenced, and with increased loudness, so as to terrify the inhabitants, who fled to the adjacent mountains. During the night, a surface of ground, from three to four leagues in extent, swelled up like an enormous bladder, in a convex form, whose elevation, in the centre, was 520 feet above the level of the ground from which it rose. Those who saw the awful spectacle assert, that flames issued forth for an extent of more than half a square league; that fragments of burning rocks were thrown to prodigious heights; and that, through a cloud of thick ashes, when illumined by the volcanic fire, the softened surface of the earth was seen to lift itself up like the waves of the sea. The two rivulets ran into the fiery chasm, and the decomposition of their waters contributed to invigorate the flames. Eruptions of mud, and especially strata of clay and basaltes, in concentrical layers, indicated that subterraneous water had a great share in producing this extraordinary convulsion. Thousands of small cones, from six to ten feet in height, were projected from the

surface, which became a kind of funnel, from which a thick vapour ascended to the height of from forty to sixty feet. In many of them, a subterraneous noise appeared to indicate the proximity of some fluid in a state of ebullition. In the midst of these cones, or, as they are named by the inhabitants, ovens (*hornitos*), six large masses were protruded to the height of from 1300 to 1650 feet above the old level of the plain; the most elevated of which now forms the volcano of Xorullo. It is constantly burning, and has thrown up from its north side an immense heap of scorified and basaltic lavas, containing fragments of primitive rocks. The great eruptions of the central volcano continued till February of the following year, when they began gradually to diminish. The country has ever since obtained the very appropriate name of *Malpays*. The terrified inhabitants, who had retired to a distance of between seven and eight leagues, became gradually reconciled to the spectacle, and having returned to their cottages, beheld, with admiration, the

streams of fire issuing from an infinite number of great and small apertures. Although the subterraneous noises now appear by no means violent, and the Malpays, and even the great volcano, begin to be covered with vegetables, yet the ambient air is so heated by the action of the small ovens, that the thermometer, in the shade, at a great distance from the surface, rose to 109. The traveller is still shown the two brooks, whose clear streams formerly watered the plantation, bursting forth at a distance of more than a mile from the spot where they were enveloped in the chasm created by the volcano. These streams, if the same, are now united in one, and are of the temperature of 126 Fahrenheit. There is near them a sulphurous stream, more than 22 feet in breadth, the water of which is most highly impregnated with that mineral. The belief among the more rude Indians in the vicinity is, that the convulsion was a miracle wrought by some Capuchin friars, who had preached, but without effect, to their tribes; that, being thus rejected, they poured forth imprecations, and declared that the

plantation should be first destroyed by earthquakes and volcanos ; and that when the latter were burnt out, the climate would gradually cool, till, from being perpetually buried in frost and snow, it would become totally uninhabitable. As the first part of the prediction has been fulfilled, and as the gradual coolness has been increasing, they live under a strong impression that the latter will also be accomplished, thus expecting an impossibility, because a natural, though unusual, operation of nature has taken place. The industry of the monks, in making converts among the Indians, is very great ; many of them are constantly employed in the work, and their anxiety to succeed in it is such, that they seldom fail to avail themselves of any natural occurrence that can be made subservient to their views.

The Indians, who inhabit this province, are of three different races, and each retains its original language ; the Tarascs, who were famed in the sixteenth century for their industry, and the advancement they had made in the mecha-

nical arts ; the Otomites, who are remarked for their low degree of civilization, and their peculiarly guttural language, which was noticed by Cortez, at the first discovery ; and the Chichimees, who, like the Tlascalars, have preserved the antient language spoken at the Aztec court. The whole of the north part of the intendancy is inhabited by these tribes, who preserve their ancient separation, if not their enmity. They are, however, all Christians, and the only white man seen in their villages is sometimes a priest, though even the ecclesiastics are more frequently of the Indian or Mestizo race. The benefices are so poor, that it is with difficulty any of the clergy can be induced to reside in a country where no Spanish is spoken, and which, on the sea-coast, is so unhealthy, that the priests frequently die of malignant fevers within six or eight months after their induction. The population of this intendancy decreased very much in the year 1786 and 1790, when the country, from long drought, was visited by a scarcity, approaching to famine. The suffering of the inhabitants

would have been much greater, but for the humanity of the bishop of the diocese ; who, at a loss of more than 50,000 dollars to himself, procured maize from the neighbouring provinces to feed the poor.

The principal city, Valladolid de Mechoacan, contains about 18,000 inhabitants ; it is the see of a bishop, and the residence of the intendant. The town-house, churches, and convents, are handsome ; and the public walk, the *Alameda*, celebrated for its beauty. Pascuaro, the next city, is finely situated on the border of a lake of the same name. It contains 6000 inhabitants, mostly Indians. A former bishop of Valladolid is interred here, Vasco de Quirago, who was distinguished by his humanity to the Indians, and by the skill with which he inspired them with the practice of industry : he died in 1556, but his memory is preserved by the rude tribes, who still call him their father. The only town besides is Huitzitzilla, with 2500 inhabitants. Some of the mines are very valuable, particularly those of Zitaquaro and Real del Oro.

INTENDANCY OF GUADALAXARA.

Guadalaxara is an intendancy extending over a surface of 9612 square leagues, and maintaining a population of 630,500 souls. It stretches 123 leagues along the shores of the Pacific Ocean, where it has the single port of St. Blas. It is crossed from east to west by the Santiago, a considerable river, which rises on the lake Chapala, and empties itself into the Pacific Ocean, near St. Bas. It is a most important means of communication between the interior of the country and the sea, and though now only used for floating timber to the naval arsenal, is capable of being made the route for the productions of Salamanca, Guanaxuato, and Zelaya, to the ocean. The volcano of Colima in this province rises to the height of 9200 feet above the sea; but the plain on which it stands being 5500, its appearance is not striking. No eruption of it is recorded, but it frequently throws up smoke and ashes. It is the most westerly of all the volcanos of New Spain. This intendancy

is both an agricultural and manufacturing district: according to the statement made by the intendant, the value of its annual agricultural produce amounted to 2,599,000 dollars, and that of its manufactures to 3,302,000. Maize, wheat, and cotton, are the principal productions of the soil, whilst the manufactories furnish cloth from cotton and from wool, both for the inhabitants of this district and some of the surrounding ones. One of the most productive mines of New Spain, that of Balanos, is within this intendency, besides which are Asientos de Ibarra, Copala, Guichichila, and several smaller ones. The city of Guadalajara is the residence of the bishop and of the intendant; and the highest court of justice, the Royal Audience, has its sessions in it. It is a corporation with a cabildo. The edifices are some of them very magnificent. The population in 1793, according to Humboldt, was 19,500; but, by an account now before us, taken in 1809, it appears to amount to more than 40,000. The only other city, St. Blas, if it were not unhealthy, would at some time become

a port of vast importance. It is the best harbour on the western shore of Mexico. It has an inland communication by means of the river St. Jago. The country about it is well covered with excellent ship timber. Pitch, tar, and turpentine, are to be procured with facility, and hemp and flax grow as far as they are permitted almost spontaneously. It is already the principal arsenal for building ships, and the chief place where the few ships of war, belonging to Spain, in those seas are refitted. It was in the contemplation of the government to concentrate their naval affairs, by conveying the stores of St. Blas to Acapulco, but the superior advantages of the former port has induced the continuance of it as an arsenal.

INTENDANCY OF ZACATECAS.

The intendancy of Zaccatecas contains 2350 square leagues, and a population of 153,000 inhabitants. Its dependance is almost wholly on the rich mines which it contains. The table-land, which forms the centre of the district, is

composed of sienite, on which strata of primitive schistus and schistous chlorites repose. The schist forms the base of the mountains of grau-wacke and trappish porphyry. There are nine small lakes to the north of the capital, which abound in muriate and carbonate of soda, especially the latter. This carbonate is of great use in dissolving the muriates and the sulphurets of silver. The central table-land of Asia does not abound in soda more than this part of Mexico. Some of the richest silver mines are worked in this province, where was discovered the *veta negra de Sombrete*, the richest seam that was ever discovered in either hemisphere. Zaccatecas, the chief place, contains a population of 33,000 inhabitants. Sombrete and Fresnillo are large well-inhabited places, and increasing as the productiveness of the mines which they surround increases.

INTENDANCY OF OAXACA.

The intendancy of Oaxaca is one of the richest in New Spain ; its extent is 4447 square

leagues, and its inhabitants amount to 535,000. Its southern boundary extends along the coast of the Pacific Ocean, from Guatemala to the province Puebla, a distance of 110 leagues. Oaxaca is one of the most delightful countries in this quarter of the globe. The beauty and salubrity of the climate, the fertility of the soil, and the variety and richness of its productions, all minister to the prosperity of the inhabitants, who have, in consequence, from the most remote period that we are acquainted with, been the most advanced in civilization of any portion of New Spain. The mountain soil of this province forms a singular contrast with that of the adjoining districts. In place of the strata of basaltes, and amygdaloid, and porphyry, with grünstein base, which cover the other regions, only granite and gneiss are found in these mountains. The height of these granite summits are not ascertained, but the Cerro de Senpualtepec is said to be the loftiest, and from one of its heights, both the seas are to be seen. This intendancy comprehends two mountainous

districts, called Mixteca and Tzapoteca. The Indians of the former, who principally cultivate the nopal for the cochineal insect, are an active, intelligent, and industrious race of people. Some ancient cemeteries which exist, though in ruins, show that the inhabitants of this district, before it was known to Europe, had made more progress than the other natives of this continent. The palace of Mitla was appropriated as a retirement for the sovereign, to lament for the loss of a wife, a mother, or a son. It forms three edifices, the principal of which is best preserved, and is 130 feet in length. A staircase, formed in a pit, leads to a subterraneous apartment, 88 feet by 26. This gloomy place is covered with *Grecques*, the same as the exterior walls of the palace. The most material distinction between this and other Mexican edifices is, its having pillars of porphyry to support the ceiling; they are 17 feet high, and the shaft is a single piece. The similarity of the apartments to those found in Upper Egypt is very striking. This province gives the title of marquis to the family of Cortez,

and the majorazgo belonging to them, consists of four towns and forty-nine villages, which contain 17,000 inhabitants. The principal city, Oaxaca, but sometimes called Antequera, contains about 24,000 inhabitants. It is the residence of the bishop, of the intendant, and the court of justice. It is well built, and was, till the late disturbances, when the insurgents entered and plundered it, a most rapidly improving place. San Antonia de los Cues is a populous place, and carries on a considerable trade. The only port is Teguantepeque, at the mouth of a river, whose bar impedes the entrance of large vessels. It is, however, the channel by which the indigo and other valuable products of Guatemala pass into the river Huascualco, in their way to the European markets. The most considerable mines are Villalta, Zolga, Yxtepexi, and Totomosla, but their produce is inconsiderable, when compared with the richer veins to the northward.

INTENDANCY OF MERIDA.

Merida is an intendency of New Spain, though

it comprises only the peninsula of Yucatan, which formed no part of the ancient empire of Mexico, and is now, in part, inhabited by a few straggling British subjects, and a numerous body of unreclaimed Indians. Its extent is 5977 square leagues, and its population is estimated at 465,000, the far greater part of whom live an erratic life. Cape Catoche was once probably joined to Cape Antonio, in the Island of Cuba; but the period, when the impetuous force of the ocean burst the barrier, and formed the Gulf of Mexico, must be more a matter of conjecture than either of history or of calculation. The peninsula has a ridge of high mountains in the centre, which divides the part to which the English have access from the Spanish inhabitants. The western side of this range alone was, strictly speaking, under the Viceroy of Mexico, who issued orders for the Indians under the authority of Spain to be removed to such a distance as to prevent their assisting in contraband trade. The soil of this peninsula, when cultivated, is fertile, and yields the subsistence and subjects of commerce which a tro-

pical climate usually affords. Its hills abound with cattle, whose hides and tallow constitute part of the exports. The climate, especially in the hills in the centre, is salubrious, and refreshed by the sea-breezes. Campeche is the principal place of commerce, but the whole shore is so flat, that vessels cannot approach within six or seven miles with safety. Its inhabitants are estimated at 7000 or 8000. The town of Merida is on an arid plain, forty miles from the coast. A small river passes it, and enters the sea at a part which can scarcely admit the entrance of large boats; what little commerce it enjoys is by this channel. Its exports consist principally of honey, wax, and an inferior kind of cotton; but the latter article, owing to the want of machines for clearing the seed from the wool, is of very little value. The population of the town is 10,000 souls. Besides these, there is the small town of Valladolid, with about 2500 inhabitants. The rest of the population is scattered in small villages, or spread in

wandering tribes. The wood, which takes its name from one of the towns of this province (*Campeche*,) is found in great abundance. It is suffered to dry for one year after it is cut down, when it is usually carried to Vera Cruz or Havanna, to be conveyed to Europe. The expences of its conveyance are so great, in proportion to its value, that it is scarcely worth converting into an article of commerce. There are no mines of any description in this intendancy.

INTENDANCY OF VERA CRUZ.

The intendancy of Vera Cruz is a narrow strip of land, extending along the coast of the Gulf of Mexico, from the river Baraderas or de los Largatos, to the great river, or rather the estuary of Panuco. Its length is 210 leagues, whilst its breadth is only from 25 to 28 leagues. Its whole surface is an extent of 4140 square leagues, and its population no more than 156,000. Having already, under the division of commerce, taken a view of its most important

depôt, the city of Vera Cruz, the capital of this intendency, we pass on to the description of its interior. There is no region of even the new continent where the change and variety of climate and production is so abrupt as is this province. The high and snowy mountains approach almost to the shore, where the intense heat of a vertical sun is felt with the fullest fervour. The western side of this district forms the acclivity of the table-land of Mexico, and the ascent is so sudden, that, in the short space of a single day, the traveller from the plain above may, from the regions of eternal frost and snow, reach the level ground on the shore of the ocean, where the most suffocating heats prevail. In ascending to the upper plain, the increase of elevation is distinctly marked by the different trees, and other vegetables, and by the modes of cultivation, which the peasantry pursue. The growth of the oak points out the limit which nature has assigned to the dreadful fever of the low country. When the region where that tree grows is once gained, the apprehension of infec-

tion from the disease of the warm climate may be at rest. In ascending to Xalapa, 4300 feet, the forests of liquid-amber announce that the traveller is in the region where the clouds from the ocean come in contact with the basaltic summits of the Cordilleras. A little higher, the banana-tree, whose fruit induces indolence in the native of the hot climates, ceases to be productive, and thus compels the peasant to a more laborious kind of cultivation. At the height of San Miguel, pine-trees begin to mingle among the oaks, and gradually increase to Perote, at the elevation of 7700 feet, where the eye of the traveller is first regaled by the spectacle of extensive fields of wheat. A thousand feet higher, the climate forbids the growth of the oak, and only pines are to be seen, which clothe the mountains till they penetrate the regions of perpetual snow. The coast of Vera Cruz is very thinly inhabited ; this may in some measure be owing to the insalubrity of its climate, though no more can be owing to that cause there, than in the other tropical regions ; but, as the coast is

the frontier against a naval enemy, the only one that New Spain could dread, the military service in the militia demanded from the inhabitants was much greater than in the cooler regions, where, from the climate, it is much less oppressive ; and, therefore, many fly from the coast, to escape the forced service in the corps of lancers and cavalry. Though the most fertile spot on the globe, yet Vera Cruz has frequently been exposed to a want of provisions, from the scarcity of labourers in its vicinity to execute the small portion of work which its productiveness demands.

In this province are two mountains of great height. The volcano of Orixaba is 17,800 feet above the level of the sea ; it resembles a truncated cone, and its crater, which inclines to the south-east, is visible at a prodigious distance. Its upper part is always covered with snow. Smoke constantly ascends from it, but it has not terrified the inhabitants by an eruption within any known period. The Coffer of Perote, another mountain, and which, with Orixaba,

serves as a guide to mariners in approaching the coast, is 13,500 in height. On its summit is a square mass, resembling a large chest, from which its name has been obtained. No crater is to be seen upon it, nor are any eruptions recorded ; but currents of lava, near some villages in its vicinity, appear to indicate that, at some distant period, there must have been a lateral explosion. A volcano at Tuxtla, to the southward of Vera Cruz, has had frequent eruptions within recent periods ; one, in March 1793, was very considerable ; the houses in Vera Cruz, Oaxaca, and Perote, were covered with ashes, and at the latter place, though a distance of 180 miles, the subterraneous noises which were heard there at the same time, resembled heavy discharges of artillery. There are no mines at present worked in this intendency ; some were formerly explored, but, after being ascertained to be too poor to be profitable, they have been abandoned. Some medicinal productions, of more value to the physician than to the merchant, are collected in this intendency. The root of

the *Convolvulus jalapæ* is found near the city, from which it has received its name. *Sarsapilla* is also found in plenty, in the humid and shady ravines of the Cordilleras. The royal monopoly of tobacco is supplied with part of its consumption from the vicinity of Cordova, and creates a large portion of that productive branch of revenue. The city of Vera Cruz is the capital of the intendancy, and to what has been already noticed concerning it, it will be sufficient to add that its population is 16,000 inhabitants, and that the public buildings and houses are all built of materials drawn from the bottom of the ocean; a species of madrepones and petchistein, as there is neither stone nor clay in the neighbourhood. Water is very scarce and brackish, so that most houses are provided with tanks for holding the rain, which falls in most copious showers, or rather torrents, at some seasons.

Xalapa, or Jalapa, is a city rather more than half the height of the central Table-land. The climate being good, it is the resort of the richer inhabitants of Vera Cruz, when their commercial

affairs do not demand their personal attendance. The sky is serene and beautiful in summer, but from December to February it wears a most melancholy aspect. When the north winds blow at Vera Cruz, the inhabitants of Xalapa are enveloped in a thick fog, the thermometer falls to 60 or 61, and for several weeks the sun and stars are utterly invisible. In the other parts of the year, when the heats on the coast are intolerable, and the sufferings from insects highly annoying, the residents at Xalapa enjoy all the delights that the most voluptuous climate can afford. The buildings in this place are spacious, and partake of that character of magnificence which is prevalent in New Spain. Some attention to study and to the fine arts is paid; and there is a School of Drawing, in which children of the poorer artisans are instructed, at the expence of the richer inhabitants. The population amounts to about 14,000, the greater part of whom are whites.

Perote is a fortress rather than a town, and in it the treasure destined for Europe is usually

lodged, to wait a secure means of conveyance. In time of war, it is said to have contained at one time more than 40,000,000 of dollars, waiting an opportunity of being conveyed to Cadiz. It is nearly 8,000 feet above the level of the sea, and in a country peculiarly barren.

Cordova is a large town, in a good climate on the eastern declivity of the Pic de Orizaba, whose inhabitants, about 6,000, are mostly employed in the cultivation of tobacco; as are those of Orizaba, another town of nearly the same population, a little to the eastward of Cordova. The inhabitants of these two places had a contest of many years continuance, respecting the course of the new road from Vera Cruz to Mexico. After much intrigue, many law-suits, and much bribery, a road was begun, and is now proceeding from Perote to Xalapa, and from thence to the bottom of the mountains near Vera Cruz, which, when completed, will have a powerful effect on the future condition of the whole viceroyalty. There are many smaller towns on the more elevated parts of the province,

which is, indeed, by far the best-peopled division of it; but in the border on the sea-coast there are merely plantations, *haciendas* or grazing tracts, *ranchos*, with none but the necessary labourers which the two species of establishments require.

INTENDANCY OF SAN LUIS POTOSI.

San Luis Potosi is the largest intendancy in New Spain, and, like the other northern parts of the viceroyalty, very thinly peopled. Its extent is 27,260 square leagues, and its population 335,000. Though this extent is mentioned, it is by no means to be relied upon, for the limits to the north have never been ascertained with any tolerable accuracy, and the greater part has never been explored by any but the native Indians. A considerable district lying between the rivers *Conchos* and *Bravo del Norte*, called *Bolson de Mapimi*, extending over 3,000 leagues, is occupied by tribes of Indians called *Apaches*, who make perpetual incursions on the Spanish settlers in *Coahuila* and *New Biscay*. San

Luis Potosi, from its southern extremity to the ridge of mountains which separate it from the *provincias internas* (which will be presently noticed), presents a regular declivity ; beginning at the Table-land of Mexico, and with a gentle descent terminating near Saltillo, where the only opening in that range of mountains is to be found. The southern part is a country whose mines are very productive, and in the northern they are supposed to be equally rich ; but the want of capital, and the thinness of the population, have hitherto prevented them from being explored. The southern part is fertile and cool, with the exception of some of the deepest valleys and the highest mountains. Wheat is grown sufficient for the higher class of inhabitants, but the poorer classes use bread made from maize. The whole country is well supplied with animal food, either from itself or from the *provincias internas*. As there are no settlements between the river Sabina and the mountains which divide it from Texas, this province contains 1,500 square leagues without habitations, and most

parts of the district present nothing but impassable marshes. Mr. Lafond, a French engineer, who passed through this country, states, that eight leagues north of Chichi, there are hills which abound in coal, from which subterranean noises resembling discharges of artillery are frequently heard. It occupies ten or twelve weeks to travel from the city of Mexico to the frontiers of this intendancy, and the greater number of nights, from want of habitations, must be passed in the open air. The city of San Luis, the capital, contains a population of 12,000 inhabitants ; being the seat of the board of revenue for the *provincias internas*, it has considerable intercourse with them. The mines of Catorce have only been worked since 1778, but they now hold the second or third rank among those of New Spain. These mines are in rocks easily worked, and requiring but a small supply of gunpowder to blast them. They have, too, the great advantage of being free from water atmost altogether, so as to need no costly machines to discharge it. The town of Catorce,

situated near the mines, and depending on them, has risen with great rapidity from an obscure Indian village, to be a large and flourishing place; and, though not yet dignified with the title of city, it is much larger than many other places so incorporated.

Though the intendency of San Luis Potosi extends over the four provinces of Leon, Santander, Cohahuila, and Texas, those divisions are no part of the viceroyalty of New Spain, but are under a chief independent of its control, though, in affairs of revenue, they are accountable to the intendant of St. Luis, and in law processes their last appeal is to the court of royal audience in the city of Mexico. As these provinces are but little known to Europe, were but slightly noticed by Humboldt, and yet promise, at no distant period, both from their natural properties, and from their local situation, as the frontier towards the United States, to be subjects of considerable interest, we shall describe them according to the *Memorial* which their delegate to the Cortez at Cadiz, Don Miguel Ramas de Arispe, presented to that body.

These four provinces occupy two hundred and twenty leagues of shore on the Gulf of Mexico. Though none of the ports are good, and all have bars at their mouths, yet they are capable of considerable improvement, and probably would be improved, if greater freedom of commerce were allowed them. The harbour at the mouth of Rio Bravo del Norte, called *El Bravo de Santiago*, is the best on the coast. It has never less than thirteen feet water at its entrance, and as the tide sometimes rises three feet, it would admit vessels, properly adapted for it, of 400 tons. It is defended from the prevailing storms by the island Malahuitas. The river is already navigable forty leagues upwards, and might be made so, with very little exertion, thirty leagues higher. The port of San Barnardo, in lat. $27^{\circ} 30'$, was, indeed, in 1808, decreed to be open for admitting vessels either from Spain or the colonies; but, up to March 1812, only three small sloops had entered it, and, owing to some jealousies of the officers of government, the restrictions on commerce were such as to forbid the hopes of increase. *El*

Soto de la Marina, a port now closed by authority, in $24^{\circ} 29'$ of north latitude, if it could be opened, would be improved by its own inhabitants, who are anxious to be allowed to do so. These four extensive provinces are separated from the other dominions of Spain by ridges of mountains, which are impassable in most parts by horses, and totally so by wheel-carriages, except at the single chasm where the city of Saltillo is built, and which has, in consequence, become the focus of all communication. Their intercourse with each other is maintained with great facility, both by means of their rivers and their extensive and rich plains; and they can exchange their different productions without encountering those difficulties which almost exclude their communication with New Spain. Coahuila, the largest of the provinces, is the southernmost, and divided from San Luis Potosi and Zaccatecas by the Cordilleras before noticed. It is 200 leagues in length and 100 in breadth. Its situation is generally elevated, and being well sheltered from the north-west winds, its

climate is generally healthy, not too hot even in the summer, nor severely cold in the winter months. Its surface is most luxuriantly irrigated by the numberless springs which burst from its hills, and produce rivulets that contribute to increase the waters of the great river Bravo del Norte. The water of these springs is generally pure, from mineral solutions, and is pleasing to the taste ; but some are impregnated with sulphur, and are used for medicinal purposes. its pastures are clothed with rich natural grasses, and admirably calculated for breeding, rearing, and fattening cattle ; and its forests furnish abundance of wood, well calculated for every kind of construction. There are mines of saltpetre, copperas, alum, lead, tin, and copper, besides some silver in Santa Rosa, and gold in Sacramento. These mineral treasures, for want of population and capital, have been rather ascertained than explored. The inhabitants are almost wholly of the white race, or with such slight mixture of the Indian blood, as to make no distinction in colour worthy of notice.

The native tribes within the province have been extinguished; but, on the borders, they have the warlike nations of the Lipanes and Cumanches to the north, and the Apaches and Mesqueros to the west. The principal town, Saltillo, contains 6000 inhabitants; it is the seat of the fiscal branch of the government for the four provinces. An annual fair is held at it, to which great crowds resort, and exchange their produce for the few articles of European luxury, which their high prices and the poverty of the inhabitants enable them to obtain. Monclova is deemed the capital of the province, because it is the head-quarters of the military; but the governor-general resides at Chihcagua, in New Biscay. He is independent of the viceroy of Mexico, and has equal power throughout the four provinces, except in matters of finance, and in legal decisions. Cohauila contained betwixt 70,000 and 80,000 inhabitants in 1811. They are solely occupied in agriculture, and produce excellent wheat and barley, and great variety of fruits. The vines cultivated here

make wine of very excellent flavour, and considerable strength; and, if admitted into New Spain, would be a valuable source of riches. The province of Texas began to be peopled from Cohauila, in the middle of the last century. San Antonio de Bejar, the principal place, is called a city, as are Espirito Santo and Nacodoches; but all have a very small population. In each town, a troop of cavalry is established; and, since 1806, detachments have been posted on the rivers Guadalupe and Trinidad, and in the port of Arcotaisas. On account of the pretensions of the government of the United States, a body of militia of 700 men has been kept constantly in active service in this province, and they, with their families, have contributed to extend cultivation and to increase the population. The plains in this province are cultivated with indigo, coffee, and sugar, but to very trifling extent; and they produce sassafras, snake-root, and some other drugs. Mines are said to exist, but none are worked.

The province of Leon, or, as it is pompously designated by the Spaniards, the New Kingdom

of Leon, is one hundred leagues in length, and fifty in breadth, all in a low and hot climate, except the town of Rio Blanco, and the Valley de Labradores, which are beyond the mountains, and with difficulty approached from the other parts of the province. Its soil is generally fruitful, and abounds in excellent pastures, on which numerous cattle are bred. It produces abundance of corn and fruits ; and mines of lead, tin, and copper, are slightly worked. The inhabitants affirm, that it has several rich mines of silver and gold, but they are too poor to work them. The city of Monte del Rey is the capital ; it is the residence of the bishop, who has spiritual authority over the four provinces. There is in it a college, a cathedral served by seventeen priests, an hospital, and a convent of Franciscans. The capital contains 9000 souls. There is another city, Linares, and several towns, but they cannot be large, as the whole population of the province only amounted to between 70,000 and 80,000 inhabitants.

The province of Santander, like that of Leon,

only began to be peopled about fifty years ago. As part of this province is on the coast, it is warm, but in general healthy, the air being free from humidity, and cooled by the trade-wind in the day, and the land-wind at night. The more elevated parts are cooler, but the mountains are not of that immense height, as to be intolerable even on their summits. The country is well irrigated, and the soil well calculated for every production of all climates. Its mines of tin, lead, and copper, are affirmed to be rich, and the ore of the latter is said to be the nearest to the pure metal of any hitherto discovered. The inhabitants amount only to between 60,000 and 70,000. Horcasitas, the capital, contains about 5000; the remainder are distributed in several smaller towns, and in numerous villages and farms, and are wholly employed in the affairs of agriculture. This province abounds with excellent horses, with which part of Mexico is supplied; they are of an active make, accustomed to perform long journeys, and, what is of vast consequence, when the use of shoes is not

introduced, with very hard hoofs. The sheep have multiplied in an extraordinary degree, for the short period during which these provinces have been settled. They not only suffice for their own consumption, but supply the markets of Zacatecas, Queretara, Mexico, and Puebla, notwithstanding their immense distance. Notwithstanding the riches of the soil, and the salubrity of the air, the inhabitants of these provinces have made no progress to be compared with that of those who have proceeded from the United States, into the western part of the continent, or to the British province of Upper Canada. This may be accounted for in some measure, from the want of capital in the settlers; for it appears that they are obliged to sell their cotton, as well as the wool from their sheep, to the people of the south, as soon as it is collected, from not having money to pay for weaving it at home. Some manufactories have commenced at Saltillo, where about forty looms are at work; but such is their poverty, that they are obliged to sell every week what they produce, that they

may purchase a supply of wool to work with in the subsequent week. Although this want of capital is a great impediment, it might be, and would be surmounted, if the bad policy of the government did not tend to keep them from improvement. Being prevented, by the system adopted in many parts of the Spanish dominions, from having direct intercourse from their own ports with any other; all they want, comes loaded with heavy duties and charges, and what they have to dispose of comes to the consumer with similar additions. In these kind of transactions the tax called *Alcavala*,—a duty on the sale of every commodity, is felt with peculiar pressure. This is strongly stated by Don Miguel Ramos, in his *Memorial*.

“ There is no open port for all the opulent kingdom of Mexico,” he says, “ but that of Vera Cruz, which has a most scandalous monopoly of all European goods. These goods at Cadiz are the second hand, Vera Cruz is the third, Mexico, Queretara, or Zacatecas, the fourth, the great fair of Saltillo is the fifth, thence they are spread

every year to the dealers of the interior, which makes the sixth hand, and then to the consumer the seventh. These goods have to their original cost added the duties of export at the place from whence they are first sent; of importation and of exportation at Cadiz, of various duties at Vera Cruz, of the *Alcavala* there, the same at Mexico, at Saltillo, and the other dealers through whose hands they pass. To this must be added the expence of freights and carriage, and the profit of each dealer through whom it has reached the poor consumer. The *Alcavala* is even levied on the last purchaser, and with such tyranny and cruelty, that the poor labourer is compelled to pay it on the remnants of cloth he buys at Saltillo to cover his naked family; and the small quantities of rice, flour, or beans, which he sells there, must bear the same costly expences of freights, profits, and *Alcavalas*. Whilst the merchants of Cadiz, of Vera Cruz, of Mexico, and of Saltillo, gain, the heavy weight of the duties and charges falls upon and

impoverishes the poor cultivator, in the *provincias internas*."

It seems to have been the weak policy of Spain to make government precede, and not follow, population; to appoint officers of revenue before there are inhabitants to pay it; to build churches, and remunerate the clergy, before any worshippers are collected; and to appoint military commanders before any troops can be mustered. The policy, both of Great Britain and the United States, has been directly the reverse. As their subjects have proceeded to cultivate the deserts, they have been left to themselves; and when, by their increase in numbers and in wealth, which, on good soils, has been with great rapidity, they have felt the want of government, laws, religious institutions, or armed protectors, they have either been supplied to them, or their necessities have compelled them to provide those requisites from their own resources. In one case, nature has been left to her own course, and she has con-

verted the desert woods into cultivated fields and populous cities ; in the other, art has been exercised where it was unnecessary, and the consequence has been a slow, languid, and doubtful progress, accompanied with arduous struggles for even the necessaries of existence.

INTENDANCY OF DURANGO.

The intendancy of Durango, or, as it is more usually called, of New Biscay, has an extent of 16,873 square leagues, and a population of 160,000 inhabitants. The northern border of this province, for more than 200 leagues, is inhabited by warlike and independent Indians. The Acoclames, the Cocoyames, the Apaches, the Mescaleros, and Fardones, possess the Bolson and mountains of Chamante, on the left bank of the Rio del Norte. The Membreros are farther to the west, in the wild ravines of the Sierra de Acha. The Cumanches, and the numerous tribes of Chechimees, included by the Spaniards in the general and vague term of Mecos, disturb the inhabitants of New Biscay,

and compel them always to travel in large bodies, or well armed. The military posts (*presidios*) on the frontiers, are too far from each other to intercept the excursions of these savage tribes, who are well skilled in all the stratagems of petty predatory warfare. The Cumanches are the mortal enemies of the Apaches, some of whose tribes live in peace among the Spaniards, and are formidable foes to the colonists of New Biscay. They have learnt to tame the horses, which have increased to wildness since the Europeans have settled in the country, and they are become expert and agile horsemen. The Cumanches, like all the savages who range extensive savannas, are ignorant of their original country. They wander over the plain accompanied by large dogs, whom they have trained to carry their tents, made of the hides of the buffalo. These savages are most to be dreaded on account of their cruelty, as they murder all their adult prisoners, and carry away the children, whom they preserve for their slaves. The Indian tribes on this frontier are certainly on

the decrease ; and, within the last twenty years, their inroads have been fewer. Their hatred to the whites is, however, unabated ; and though the frequent want of success may have lessened their hopes, it has not diminished either their animosity or their courage. They have concentrated themselves in the vicinity of Moqui, and in the mountains of Nabajoa, and have driven away the Spanish colonists. The evil effect of being thus stationary in a strong country will be long felt, and prevent their becoming more civilized ; as the spirit of revenge which Indians peculiarly imbibe will act as an obstacle to their intercourse with the Europeans, or with those tribes that live among them. If the same races of Mexican Indians existed in New Biscay as in the table-land of the viceroyalty, the wild tribes would be more likely to become gradually conciliated by them than by Europeans alone. But, in New Biscay, there are no Indians who pay the tax, and are thereby freed from the alcavala. All are whites,

or so nearly approaching to that race, that they are accounted such.

This perpetual state of warfare with the Indians, which has long endured, by which the colonist, in his lonely farm, is under the necessity of being always watchful and always armed, has given to the inhabitants of the frontiers a degree of courageous energy, and a temperament of a peculiar kind. The climate is favourable to corporeal strength, and these causes have created a race of borderers who endure hunger, suffer fatigue, maintain watchfulness, and exhibit courage, which, though now only called forth by predatory warfare, would become powerful means of defence if they should be involved in warfare with the descendants of other Europeans, advancing towards them from the United States. This strength of body is said, also, to be productive of strength of mind, and a happy disposition of the intellectual faculties. Those who superintend the seminaries of Mexico have remarked that their most distin-

guished students in the exact sciences have been natives of the most northern provinces of New Spain. Durango is a mining country, and consequently furnishes both capital and consumers to the agriculture, which, for the paucity of the inhabitants, is in a flourishing state. Near the better-peopled division of the country, wheat is grown sufficient for those who prefer it to maize, which is, however, the common food of the greater proportion of the inhabitants.

The climate is generally temperate. In even the more settled parts, snow is not unusual in the winter, and the thermometer descends frequently below the freezing point to 14° of Fahrenheit. A singular group of rocks is seen near the capital, which have engaged the attention of mineralogists. The basis of these rocks, called La Brena, appear to be basaltic amygdaloid, which seem to have been raised up by volcanic fires. They are covered with scoria. They are in the midst of a level plain; are twelve leagues in length from north to south, and six leagues in breadth from east to west. They are

of a most grotesque form ; and, on the summit, there is a crater 320 feet in circumference, and 100 feet in depth. Near these rocks, a remarkably large mass of iron is found in the midst of a level plain ; it is probably an aerolite. Its weight, calculated by its size, is 17 tons 9 cwt. The city of Durango is the residence of an intendant, and of the bishop of the diocese ; its population amounted to about 12,000. Chichuahua, San José del Parral, and San Juan del Rio, contain about 10,000 each ; and there are several smaller towns, many of which derive their names, as well as their existence, from the mines near which they have been built.

INTENDANCY OF SONORA.

The last intendency of New Spain is Sonora, extending over 19,143 square leagues, and inhabited by 121,400 persons. From the proportion between its extent and population, it will naturally be inferred, that a very small portion only of it is cultivated. It extends through ten degrees of latitude on the Pacific Ocean and

the Gulf of California. In some parts it is not more than 50 leagues in breadth, and in others 120. The post from Mexico to California passes through this district on horseback, and crosses the gulf in a launch to Loreto, or Old California. The whole distance traversed by the courier with correspondence from Guatemala to San Francisco, in New California, is upwards of 3000 miles. The northern part of Sonora is chiefly inhabited by a numerous Indian nation, called the Pimas. They mostly live under the direction of missionary monks, and are followers of the Catholic rites and ceremonies. In the ravines of this mountainous country much gold has been found, sometimes in very large grains; but the washing places are subject to incursions from some unreclaimed Indians, which prevent their yielding to the extent they would do under other circumstances. There has been hitherto no permanent intercourse between Sonora, New Mexico, and New California. The government has directed chains of missions to be established to preserve the communication, but its efforts

have been fruitless. Two monks of the propaganda of Queretaro have recently been enabled to traverse the whole country from Monterey to San Francisco, without crossing, as is commonly done, into any part of California. Father Graces and Father Font departed from Horcasilas, and in eleven days reached an extensive and beautiful plain, at one league distant from the southern bank of Rio Gila, where they discovered the Casa Grande; the place at which the Astec nation rested many years, in its progress from the north to the place where it finally settled. It is constructed of rammed clay in squares of unequal sizes, but symmetrically placed. It is a square, each of whose sides is 445 feet and parallel to the cardinal points. The walls are four feet in thickness. The edifice had three stories and a terrace, and the staircase was on the outside. A wall, on which were square towers, surrounded it, and appeared to have served for purposes of defence. There are vestiges of an artificial canal from the river for supplying it with water, and the whole sur-

rounding place is covered with fragments of earthen pots and pitchers, some of which are neatly painted with red or blue. There are besides found many pieces of the volcanic glass, or obsidian, which was used when the Spaniards first visited Mexico, for mirrors, as well as for razors, knives, and arms. This is deemed by the Mexican antiquaries to be a decisive proof, that those who emigrated to this place came from some more northern region, where the volcanic production is profusely to be found. Those Indians who inhabit the plains near the river Gila, by no means deserve the appellation of savages, though they never had, before these missionaries visited them, any communication with the inhabitants of Sonora. They were found in villages of two or three thousand persons, were comfortably clothed, and had fields cultivated with maize, cotton, and gourds. The missionaries, in order to convert them, exhibited a large picture, painted on a cotton cloth, which represented a sinner burning in the flames of hell. It terrified them, and they requested the

fathers not to unrol it again, or to speak to them of what would happen after death. These Indians are of a mild and sincere character. When the missionaries explained to them, by an interpreter, the security which prevailed in the Christian missions, where an Alcalde administered justice; the chief replied, " This order of things may be necessary for you, but we do not steal, and we very seldom disagree; what use, then, have we for an Alcalde among us?" The most considerable places in this intendency are Sonora, the residence of the bishop, and Arispe, each of which contains a population of 7000 or 8000; but Cinaloa, Culiacon, and Las Almas, each reckon their inhabitants at near 10,000. There are several silver mines, which, though beneficial to their proprietors, are worked to a very limited extent.

NEW MEXICO.

New Mexico has been pompously dignified by Spanish writers with the title of a kingdom,

though it does not contain more than 40,000 souls, on a few detached spots in a surface of near 6000 square leagues. It is a long and comparatively narrow strip of country, through which that great river Bravo del Norte runs. Its boundary towards the north has never been ascertained, though the government of the mother-country has claimed, as a portion of the whole track, up to the 38th degree of north latitude. In this view of it, the length is 175 leagues, whilst its breadth varies from 30 to 50 leagues. Though it has been settled, as far as establishing some towns can be said to settle a country, for more than 200 years, yet it is separated by uninhabited and most malignant marshes, in which travellers are frequently exposed to attacks from ferocious tribes of unreclaimed Indians. Three stations were originally fixed on as garrisons (*presidios*) to maintain the communication ; but, in a general revolt of the Indians, they were either destroyed or abandoned. There are several passes which are dangerous for passengers, especially the defile

of Robeledo, to the west of the great river, and the desert del Muerto, in both of which, many white persons have been massacred by the wandering Indians. The desert of the Muerto is a plain of 30 leagues in extent, and destitute of water ; and the whole of that district suffers from the same cause, as there is not a single spring issuing from the mountains of *Los Mansos*. From this aridity alone, it is impossible that the two populations should ever unite, how much soever they may both increase their numbers. Though New Mexico is in the same latitude as Syria and Persia, the climate is remarkably cold. It sometimes freezes in the month of May ; and, a little to the north of Sante Fé, the great river is frozen sufficiently hard to admit the passage of men and horses in the winter season. The mountains which bound this great river do not wholly lose their snow till the beginning of June. The elevation of the river in these cold regions has never been exactly ascertained ; but, at the capital, it is not supposed to be greater than

2200 or 2600 feet. The most interesting circumstance attending New Mexico is the great river Bravo de Norte, the Mississippi of this part of North America, passing through the whole of it ; a circumstance which, when the country is fully peopled, must make its possession a matter of the highest importance. This great stream has its origin in the Sierra Verde ; the point of separation between those streams that run to the south sea, and those that run to the Mexican gulf. Like the Orinoco, the Mississippi, and other American rivers of similar long course, it has periodical rises and falls. The waters begin to swell in April, increase through May, and reach their highest pitch in June. In the drought of summer alone it is fordable, and then, from its rapidity, only by horses of extraordinary strength. The borders of it are well wooded, irregular, and highly picturesque. Its waters are remarkably turbid, like the Orinoco and the other vast rivers of South America. The recollection of a very

extraordinary event, which occurred in this river in 1752, is preserved by the inhabitants. The whole bed of the river became suddenly dry for more than thirty leagues above and twenty leagues below El Passo. The water made for itself a new channel near the Porideo of San Eleazario. This loss of the river continued several weeks. The fine plains which surround El Passo, and which are irrigated by small canals, became wholly dry, and the inhabitants could only obtain water by digging wells in the forsaken channel of the river. After a time the stream resumed its former course, and continued its accustomed channels, probably because in the new course the deposit of its mud had filled the chasm, and the subterraneous conductors had become filled up. In some part of the northernmost division of New Mexico, the rivers empty themselves into the Mississippi, and the river De Pecos is probably the same with the Red River of the Natchitoches; and, perhaps, when the geography of the district is ascertained, the river called by the

Spaniards Napestia, may prove to be the same as that which lower down is called by the Anglo-Americans the Arkansas.

The colonists of New Mexico live in a state of perpetual hostility with the Indians that surround them ; hence, though there are several towns and garrisons (*presidios*), there are no solitary farms or extensive plantations ; all are concentrated around those places whose population is sufficient to bid defiance to the wandering Indians. The colonists are provided with all that nature absolutely requires from their own soil ; the grains of Europe flourish, and the pastures supply abundance of animal food ; all other supplies they must dispense with, as they are too far removed from the civilized world to maintain any commercial intercourse.

The capital is Santa Fé, situate to the east of the great river ; its population is about 3,600. Albuquerque, to the west of the Sierra Obscura, has a population of 6,000 ; and Taos, to the north, has about 9,000. The Passo del Norte is a garrison, at which travellers must provide them-

selves with food to subsist on during their journey of 60 leagues, over the desert which separates it from Santa Fé. The fields there are well cultivated with maize and wheat, and the vineyards produce excellent sweet wines. The gardens are well stocked with figs, peaches, apples, pears, and the other fruits of Europe. Artificial irrigation is here conducted on very simple but very good principles, and the effect is visible in all their crops.

CALIFORNIA.

Although the country of California is not, strictly speaking, a part of Mexico, yet it is a dependant upon the government of that viceroyalty, and can have no intercourse with Europe but through it; there seems, therefore, no place so proper to introduce the most recent information respecting it as after that country. It is divided into two intendancies, called New and Old California; the latter, though first settled, contains the fewest inhabitants; they are not estimated at more than 7,000 or 8,000, though

the district contains nearly as many square leagues of surface. Of these, two-thirds are Indians, who, though they may be taught a few Catholic prayers and ceremonies, are almost as untamed as they were three centuries ago. The number of white people do not exceed 1,000, who are dispersed on several missions and garrisons, designated on the Spanish maps with the names of towns, but which are, in reality, but miserable collections of hovels. Lorette is the most important place, being a presidio; and, besides it, there are two missions, Santa Ana and San Joseph; the latter of which has been best known from its having been the station in which the astronomical observations were made, and the transit of Venus observed in 1768, by the French Abbé Chappe and a Spanish astronomer, Don Vincente Doz.

New California, though to the north, and in a less genial climate, possesses a more fertile soil and more numerous population. The inhabitants were estimated at 15,000 in about 2,000 square leagues of extent in the year 1802. The

settlement of this country has been but recent, being first occupied by Spaniards, in 1769. Its increase since that period, with very trifling additions from fresh emigrants, has been singularly rapid. The numbers in 1790 were 7,748 souls; in 1800, 13,468; and in 1802, 15,562. The fertility of the soil is such, as must cause a continued increase, if, as cannot be doubted, the principle is correct that the multiplication of mankind is limited by the quantity of food that can be produced. It is stated, on good authority, that in the year 1791 there were sowed in the whole province 874 fanegas of wheat, the produce of which, at the harvest, amounted to 15,197, or more than 17 for 1. The next season recorded, that of 1802 was nearly as beneficial. The seed sown was 2,089 fanegas, and the crop reaped was 33,576 fanegas. The increase of the flocks and herds seems to be keeping equal pace with the produce of the corn-fields. In 1791, the black cattle were 24,958, and in 1802 they had been augmented to 67,782; whilst sheep, horses, mules, and pigs, had

been similarly increased. As in other Spanish colonies, some impolitic regulations check its growth. The soldiers are discouraged from becoming cultivators, and the monks, who rule the country, rather discourage the settlement of white people, because they are less obedient than the Indians, whom they convert. In spite of these regulations, however, the colony bids fair to become populous and flourishing. The climate is remarkably salubrious, and the fruits of Europe flourish most luxuriantly, especially the vine, from which already some very good wine has been made. There are abundance of wild animals, especially stags of vast size, with horns of enormous length, some said to be nine feet long. These animals, called venados, are remarkably swift of feet. They are caught by hunters on horseback, but, being swifter than the best horses, they can only be come up to when they stop to drink, when a running noose is thrown over them, in the same dexterous manner in which the Spanish hunters take wild horses and cows. The Indians have a different mode of

taking these animals. They place the horns of one on their own heads, and conceal in the bushes every thing but the horns, which appear above; the herd approach without fear, and are then killed by arrows. The animals lately exhibited in London, under the name of Wapiti, were of this kind; and though stated, by the proprietor, to have been caught on the banks of the Missouri, were, more probably, the venados of California. They had not arrived at their full growth, but one of them was then on the shoulder seventeen hands two inches in height. The capital of New California is San Carlos de Monterey. It has an excellent bay, and good anchorage in six fathom water; and the English ships, bound to the fur stations on the north-west coast of America, find refreshments there, which are highly grateful in their protracted voyages. The other settlements on the coast amount to twelve, whose population varies from 500 to 1,500 souls. The whole cultivation, and nearly all the inhabitants, are either in these places or in their immediate vicinity.

THE PROVINCE OR KINGDOM OF GUATIMALA.

The history of this province will be found embodied in the recent political history of the whole kingdom of Mexico, and, it will be observed, was the principal scene of action, occupied by the constitutional General Morelos. It is now a united state of the Mexican nation, under the present constitutional government.

TERRITORIAL EXTENT.

The province of Guatemala is the last in North America, and is situated between the 8th and 17th deg. of north latitude, and the 82d and 95th deg. of west longitude. Its whole length is 260 leagues. Its breadth in the widest part is 180 leagues, and in the narrowest about 60. On the west it is bounded by the intendency of Oaxaca, on the north-west by the intendency of Yucatan, on the south-east by the province of Veraguas, on the south-west by the Pacific Ocean, and on the north by the Atlantic Ocean.

FACE OF THE COUNTRY, CLIMATE, SOIL, &c.

The province of Guatemala is divided into districts or sub-provinces, the names of which are as follow, Chiapa, Tuxtla, Suchiltepeques, Escuintla, Guazacapan, Zonzonate, St. Salvador, St. Anne, St. Vincent, St. Michael, Vera Paz, Peten, Chiquimala, Acasaguastlan, Honduras or Comayagua, Tegucicalpa, Nicaragua, Tola-galpa, Leon, Matagalpa, Realejo, Subtiava, Nicoya, Costa Rica, Gueguetenango, Quezal-tenango, Solola or Atitan, Chimaltenango, Sa-catepeques.

In such a large tract of country as the province of Guatemala, whose shores are washed for a very considerable distance by both the Atlantic and Pacific Ocean, the face of the country must be as various as it is extensive. Near the sea it is flat, marshy, and unhealthy; but less so on the side of the Pacific than the Atlantic sea. The interior of the country is much elevated, and, therefore, more salubrious; but at all times very hot, from its

proximity to the equator, and presents an alternation of mountains and plains, which peculiar diversity of formation fits it for almost every kind of agriculture. The soil is so fertile, even on the tops of mountains, that it yields fruits without preparation, and those in the greatest abundance.

Amongst the fruits are to be found the plantain, apple, pine-apple, peaches, sapotes, jocotes, and many others.

The variety of flowers is exceedingly numerous and exquisitely beautiful.

Culinary vegetables are also very common.

The astonishing fecundity of the soil of Mexico, generally, has excited the surprise of Europeans, in which this province exceeds all others. Grain has been known, in many instances, to produce *five hundred fold*; and always *two*, but sometimes *three* harvests in a year.

These consist of wheat, barley, rice, and a kind of Indian corn called sessamum.

There are several species of pulse, kidney-

beans, garbangos or Spanish peas, lentils, beans, and several others.

In short, there is not any thing, whether classed under the necessities of life, or included in the list of luxuries, which the soil is not capable of producing.

In a commercial point of view, there are few countries in the world which produce, without the aid of manufactures, such valuable, varied, and abundant merchandize. The woods consist of cedar, caoba or red wood, granadillo, ronron, brasil, purple wood, mahogany, guayacan, mangrove, and many others ; the medicinal plants of note are, palo de la vida, copalchi, sarsaparilla, hellebore, contrayerba, musk, canchalagua, calaguala, tea, coffee, ginger, mechoachan, julep, cassia, tamarinds, &c. A prodigious variety of gums and balsams, estimable for their fragrance or curative virtues ; as turpentine, carana, leche de maria (*dragon's blood*), amber, white and black balsam and oil of balsam ; also cochineal, achiote, pepper, lacre, bastard saffron, chiapa pepper, vanilla, hides, sulphur, saltpetre, sal

ammoniac, purple (*from the murex*), mother-of-pearl, tortoiseshell, cotton of various kinds, tobacco, and above all, *sugar*,* *cocoa*, and *indigo*; the two last superior to all other in the world.

In this province are found all the animals common to Mexico, the danta, armadillo, tepisguinte, alligator, quana, lories and parrots of various kinds; besides which, a small fox, called a zorilla, and a bird, the plumage of which is superbly splendid, called quezal,† are peculiar to this region.

* In the district of Chiquimala are manufactured small loaves of unrefined sugar, of a brown colour, called *panelas*, or raspings; they are so extremely sweet, that they very soon cloy the taste, and there is an immense consumption of them in all parts of the country, being used not only for domestic purposes, but also for making brandy and chica, a drink of the Indians, with which they intoxicate themselves.

† The plumage is of an exquisite emerald green, and the tail-feathers very long. The natives make use of them in their dances as ornaments; they were formerly sent to the kings of Mexico as a very valuable present. Great care was taken not to kill the birds, and they were released after having been robbed of their beauty. They build their nests with two openings, entering at one and quitting at another, to avoid disturbing their plumes.

The earth is by no means destitute of the precious and valuable metals, for amongst its mineral productions are included gold, silver, iron, and lead; previously to the revolution in the district of Chiguimal, the mines of *Alotepague* were the most productive. In the district of Comayagua the *Valley of Olancho* is memorable for the immense riches that have been collected from the river *Guayape*, that flows through it; and even, till late, the purest gold found in the province, was to be found in its sands. In the district of Tegucigalpa, in the jurisdiction of *Choluteca*, is situated *El Corpus*, the richest mine in the kingdom; it produced gold in such large quantities, as, at first, to excite suspicion of the real nature of the metal, and a treasury was established on the spot, for the sole purpose of collecting the king's fifth; it, however, terminated unsuccessfully. Silver is found in the district of St. Salvador.

There are a great many rivers and several lakes in the province of Guatemala. Some of the rivers discharge themselves into the sea

northward, and others to the south. The following are navigable ; Fresh Gulf, Motagua, Camalecon, Ulua, Lean or Leones, Aguan, Limones, Rio Tinto, Plantain, Pantasma, Mosquito, St. Juan north ; and Guista, Lamala, Zicalapa, Michatoyat, Slave, Paza, Zonzonate, Lempa, Viego, Nicaragua, and Nicoya south. The most celebrated lakes are those of Granada ; the largest, Atitan, Peten, and Amatilan.

The lake of Nicaragua, or Granada, is the largest of this province, and may rank amongst the most extensive in the world ; being more than 180 miles long, from west to east, and nearly 100 broad, from north to south ; having almost every where a depth of 10 fathoms, with a muddy bottom, except along the shore, where there is clean sand. The city is supplied with water from the lake, which also furnishes an inexhaustable abundance of fine fish. It is rendered extremely picturesque, by the numerous small islands with which the surface is studded : these are all uncultivated, except Ometap, which is inhabited. On this there is a lofty mountain,

of a conical shape, that is an active volcano, and frequently emits both flames and smoke. The lake itself is liable to tempestuous agitations, when the waves rise with violence, as they do in the open sea, under the impetus of a heavy gale. Although a great number of rivers fall into this basin, and the river St. Julian is the only visible outlet, yet it is remarked, as an extraordinary phenomenon, that there is no indication, at any time, of increase or decrease of the waters. On the north, the district of Matagulpa, and many large farms for breeding cattle, border the lake; on the south, are the city of Granada and the town of Nicazague; on the east, the river St. Juan communicates with the Atlantic; and on the west, is the lake of Manague, or Leon, which extends upwards of 50 miles in length, by nearly 30 in breadth, and is connected, by a canal, with the Nicaragua river.

There are several volcanoes; a description of which will be found under the title volcanoes.

There are several cities and towns, the principal of which is the city Guatimala.

The old city of Guatimala, once the metropolis of the kingdom, was an archbishopric, and one of the handsomest cities in the New World. As the capital of the kingdom it was the residence of the governor and captain-general, who was also the president of the chancery and the royal audiencia: it was situated between two volcanoes, a place of great fertility, very pleasant, under a fine climate, and abundantly supplied with excellent water; but, after 14 years progress, when a cathedral, convents, religious houses, houses for the cabildos, and a hospital, were built, farther improvements were terminated by a calamity that finally decided its fate. On the night of the 11th of September, 1541, an eruption of water, from the mountain, took place; when a torrent, so immense, rolled down from the summit, sweeping before it large trees and enormous rocks, that the city was overwhelmed, the buildings destroyed, and great part of the inhabitants buried in the ruins. This disaster induced the survivors to seek a new scite for their city, when they fixed upon a spot about a league north-east of this scene of desolation,

which is now properly called old Guatimala. There a magnificent city was soon raised, but the dreadful calamities of earthquakes so repeatedly visited it, that all its local advantages of fine climate, and fertile country, were rendered unavailing. Wearied by these misfortunes, and of rebuilding only to experience repeated destruction, the inhabitants once more determined, after the shock of 1773, which left one part of the city in ruins and severely injured the other, to change their situation, and choose a spot farther removed from the volcanoes, the prolific source of so many horrors to them, and where they would be less exposed to similar miseries; they, therefore, after many examinations, chose the plain of la Virgen, in the valley of Mexico, where, in 1776, was founded the new metropolis, in virtue of a royal decree, bearing date the 21st of July, 1775, which ordained that the city should be called New Guatimala de la Ascuncion, because the last chosen spot was within the curacy of the hermitage, called La Ascuncion de Neustra Senora.

New Guatimala stands on a spacious plain of

five leagues diameter, watered by several small rivers and lakes, that greatly conduce to its fertility, in a delightful climate, where the inhabitants scarcely know a change of temperature. The city forms a square, about 15 manzanas each way ; it is divided into four quarters, and the quarters into two barrios or wards ; each superintended by its peculiar alcalde, elected annually from the residents, and exercising his jurisdiction under the control of the judge of the quarter, who was always a minister of the royal audiencia. For the administration of spiritual concerns, the city is divided into three parishes, each extending its whole length from east to west, and embracing a third part of it from north to south ; the centre is called the parish of the Sanctuary of the Cathedral ; the northern side, *St. Sebastian*, and the southern, *Los Remedios*.

The streets, which cross each other at right angles, are 12 yards broad, the greater part of them paved : the houses, although rather low, to mitigate the violence of future earthquakes,

are built in a good stile, very commodious, and judiciously decorated, nearly all of them enjoying the advantage of kitchen and pleasure-gardens, with two, three, and even more reservoirs of water. The great square is a rectangle, 150 yards each way, paved all over, and having a colonade on each side.

The eastern side presents the grand entrance to the cathedral, with the archiepiscopal palace to the right, and the College de Infantes on the left ; on the opposite side stood the royal palace, the hall of audiencia, and offices belonging to that tribunal, the chamber of accounts, the treasury, and the mint ; on the north side are the houses of the corporation, prisens, markets, public granary, &c. ; and on the south side the custom-house and the marquesado de aizinena. In the middle there is a large stone fountain, of very superior workmanship, supplied with water brought by means of pipes from the mountains to the south-east, upwards of two leagues distant ; from the same source, twelve public reservoirs, in different places and streets, besides

many belonging to the convents and private houses, derive their supplies.

This aqueduct is in some places carried over vallies upon an extensive range of arches, and in others through hills, by excavations, that have cost immense labour to complete. From the south-west there has been another stream of water brought into the city by similar means, and although from a greater distance, it has, from the nature of the country through which it passes, been effected with much less difficulty. The cathedral is small, but in a very fine style of architecture, and not yet completed; the pedestals and capitals of the columns, the vaultings of the chapels, and many other parts of it, are executed in a manner that entitles them to the admiration of a scientific observer. Many other churches and convents are still in a progressive state; and, except the Jesuits' college, with its appendages, and eleven of the minor churches, intended to be similar to those already mentioned in Old Guatemala. But, besides those spoken of at the former place, there are

the college of Seisses, the female seminary, called the Visitation, the Hermitage del Carmen, situate on the summit of a hill near the city, and that of one of our Lady of Guadalupe. On the north-east, adjoining the city, there is an extensive suburb, divided into two quarters, and four barrios, over which the two ordinary alcaldes are the presiding magistrates; the parish of Candalaria and the college of Visitation are in this division, the streets of which are crooked and irregularly built. Although not surrounded by so many villages as Old Guatemala, the markets of the new city are equally well furnished with provisions of all descriptions, from the same sources, and the great markets present a choice of vegetables, fruit, flowers, poultry, game, eggs, and other commodities not often surpassed in any region.

New Guatemala is in $14^{\circ} 40'$ north latitude, and $91^{\circ} 46'$ west longitude, nine leagues from Old Guatemala, 180 from Ciudad Real de Chiapa, 144 from the city of Mexico, 90 from the Atlantic Ocean, 26 from the Pacific, 195

from the boundary of New Spain, and 480 from that of Terra Firma.

The population of the whole province of Guatimala exceeds 1,000,000.

This region was formerly possessed by people of many different nations, each governed by its chief, and who were continually at war with each other ; hence it is that the present inhabitants speak so many different languages ; some using the Mexican, others the Quiepé, Kachiquel, Subtujil, Mam, Pocomam, Poconchi, Chorti, Sinca, and many more. Although these tribes are of different origin, various in their manners, opposite in their inclination, profess distinct faiths, adopt dissimilar customs, and speak each its peculiar language, yet, at the present day, they all concur in the exercise of the Catholic religion, which is the only one professed throughout the provinces, with the exception of some few idolaters, whom all the efforts and zeal of the ministers of the gospel have not been able to bring within the pale of Christianity.

TRADE AND COMMERCE.

In consequence of the political changes which have taken place in Mexico, commerce has taken an entirely new turn, and instead of being confined to the continent of Old Spain, it is now thrown open to all the world—there has necessarily been a great influx of those articles of European export which are the peculiar consumption of the country; and more particularly at a time like the present (1824,) when the peace of Europe has brought with it that freedom of trade which before was more immediately confined to England, as mistress of the sea; and the competition of other nations being at the same time introduced, has tended much to lessen the profits upon commercial enterprise; though, on the other hand, it has been more generally diffused. The peculiar political situation of Mexico, in regard to England, to whom she has applied, and successfully, to furnish the sinews of government, together with the favorable impression that the English have made

upon the natives, altogether conspire to give her greater influence than it is likely any other nation will obtain.

Hitherto, notwithstanding the great population of Mexico, and its extensive agriculture, its commerce has been very circumscribed; from a great variety of combined causes, political as well as natural, such as the unjust restrictions laid on it in the European metropolis, and the natural impediment of bars and shallow water on its eastern shores. As the trade of Vera Cruz is, however, of exclusive importance, the consideration of it must be principally attended to.

The harbour, if it deserves the name, is protected from all but northerly winds, by a cluster of islands which surround it, and is rather a strait between the main land and the island Gallega, on which the castle of St. Juan de Uloa stands, than a secure port. The depth of water at the entrance is four fathoms, and at the moorings not more than four and a half. The ships are secured by having their cables

fastened to ring-bolts fixed in the castle of St. Juan. The tide rises but once in twenty-four hours, and varies from one to three feet in its rise. When a violent gale from the north occurs, the vessels are no longer safe, but must seek security by running to sea; and if the gale does not endure so long as to drive them on the shore of Campeche, when it is over they may return to their moorings. The nature of this port is an impediment to commerce, but none better has been found by which a connection with the interior can be maintained. The city of Vera Cruz is peculiarly unhealthy, and equally dreaded by the sailors from Europe and the natives of Mexico, who descend from the table-land to convey the goods to and from the shore. The merchants, too, among whom are some of very great capital, prefer residing at Xalapa, to breathing the pestiferous air of the hot region, and thus the climate, as well as the physical imperfections of the port, acts as an impediment to commerce. Considered as a single port, and

viewing the circumstances of its position, the trade of Vera Cruz is enormous, but as the only point of commerce for a rich country of eight or ten millions of inhabitants, it is very small.

The importations consist principally of the superior kind of clothing which are required by the higher classes, of wine and brandy, of paper and iron. These amount together to about £4,500,000 sterling. Besides, there are imported from the other Spanish settlements in America various articles, but principally cocoa and bees-wax, to the amount of about £350,000, thus making the whole imports somewhat less than £5,000,000. The exports consist almost wholly of the precious metals, of cochineal and indigo. Some sugar is exported, and it is an increasing production, which, when the new road is completed, must be very considerably augmented. Flour has also of late been exported to the islands, especially to Cuba, and this commerce must also increase as the roads are improved.

*Average Value of Exportations from Vera Cruz,
computed in British Sterling.*

Cochineal	- - - -	£760,000
Indigo	- - - -	725,000
Sugar	- - - -	325,000
Gold and silver, coined and wrought	- -	3,950,000
Various small articles, amounting together to		56,000
		<hr/> £5,816,000

To the other Settlements in America.

Flour and other provisions	£137,000
Gold and silver	- - - 843,000
Various small articles, amounting together to	50,000
	<hr/> £1,080,000
	<hr/> £6,846,000

The commerce is carried on by about 250 vessels, of different sizes, which annually load and unload here. The greater part of the indigo, and some part of the cochineal, are the products of Guatemala,

brought to Vera Cruz for the convenience of transporting to Europe. These are conveyed partly by land and partly by the river Huasacualco, and merely pass through Vera Cruz ; and in estimating, the exports ought to be deducted from the amount : allowing for these one million, the whole exported productions of this vast country, independent of gold and silver, does not exceed in value, in the whole year, what is exported from Great Britain weekly.

Humboldt states the number of persons employed in the mines not to exceed 30,000, or one in two hundred of the whole population ; the exportable produce of whose labour amounts to £4,793,000 ; whilst the surplus produce of all the rest of the inhabitants does not amount to much more than one-fifth of that sum. The United States of America, with a population nearly the same as Mexico, having about as many negro slaves as New Spain has of Indians, and cultivating a less grateful soil, have been enabled to export surplus native productions to fourteen times the amount ; and Great Britain,

with only half as many more inhabitants, exports sixty times as much.

The commerce of Vera Cruz is under the direction of a body called the *Consulado*, consisting of the most eminent merchants. This body acts as a court of justice in all commercial affairs, which they decide with promptitude and equity, without the intervention of lawyers. As a corporation they enjoy considerable wealth, which is expended in promoting the security of the port, and in improving the roads that lead to it. For these purposes a tax is levied on all imports and exports, which is expended under their direction. The other foreign trade of Mexico, if that can be called a foreign trade which is carried on with a colony of the same sovereign, is from Acapulco, in the Pacific Ocean, to Manilla. Acapulco is one of the best harbours in the world; it has two entrances, and is completely sheltered by the island at its mouth, which separates these entrances. The anchorage is good in from ten to twenty-five fathom water. Though the immediate vicinity of this

port is a barren soil, and the situation at present unhealthy, yet in process of time it must become a place of considerable importance. There are few inhabitants except at the fair, which is held on the arrival of the ship from India, when both the town and the neighbouring villages are crowded with visitants. This whole trade is carried on by a single ship, called the galleon. It is usually from 1200 to 1500 tons burden, and is commanded by an officer of the royal navy. It sails from Manilla the latter end of July or beginning of August, loaded with caticoes, muslins, silks, spices, drugs, and the other valuable productions of India and China. The value of this cargo is limited by law to five hundred thousand dollars, but it generally amounts to treble that sum. The merchants of Mexico and Lima are interested in the expedition; but many of the ecclesiastical corporations invest part of their funds in the speculation. The arrival of the galleon draws to Acapulco numerous purchasers, who are frequently disappointed, by finding, on their arrival, that, by a

combination among some of the great capitalists of Mexico, the whole cargo has been disposed of in a single lot. The returns from Acapulco to Manilla are made almost wholly in coined silver, and amount to between one million and a million and a half of dollars. Some iron is sent, a little cochineal, oil, cocoa, and wine, but these are of small amount. Many passengers go by this annual ship to Manilla, especially the missionary monks, who are destined to make proselytes on the Philippine Islands. A small portion of commerce is conducted between Acapulco and the ports of Guyaquil and Lima. The vessels from the south bring Peruvian wine, oil, copper, and cocoa, and return with a few woollen goods manufactured at Queretaro, some cochineal, and a quantity of contraband East India articles. Though this passage from south to north is easily accomplished, yet, in the imperfect state of the art of navigation which is practised on the coasts of the Pacific Ocean, it generally requires more weeks to return than it does days to arrive. Acapulco, in the hands of a power

with capital and industry, might command the whole of these two valuable branches of the fishery, from which the English and the Anglo-Americans have derived such great advantages. The spermaceti whales are caught on the very coasts, and the black whales are abundant a few degrees to the northward; but, though the Mexicans have constantly before their eyes the benefits which their rivals draw from this source, not a single vessel has ever been equipped by them for either of these fisheries. The trade in furs on the north-west coast of America, and the conveyance of them to China, belongs to this part of the world, from whence traders would find advantages that would defy any competition from those who are obliged to coast the whole of North and South America on both sides the continent, before they can reach the station where their trade commences.

RECENT POLITICAL HISTORY AND PRESENT GOVERNMENT.

The tranquillity of Mexico had never been disturbed, from the conquest of the country by the Spaniards till Charles the Fourth was deposed by Napoleon, then Emperor of the French. Unaccustomed as the Mexicans were to the use of arms, they, nevertheless, could not tamely see themselves transferred from the dominion of the Spanish monarch to that of the all-grasping Bonaparte. Rumours had scarcely reached Mexico of the compulsory resignation of Charles, and the proclamation of Ferdinand, when the then Viceroy Iturrigary assembled the audiencia,* and laid before them the gazettes containing the transactions at Bayonne.†

* The court of justice, called the royal audiencia; and, though it had no power to control the viceroy, yet, from its important duties, was the highest tribunal, and a species of privy-council.

† 15th of July, 1808.

By the advice of that body he published the French accounts, without any intimation of the injustice done to the Spanish King, or of the course he meant to pursue. The inhabitants of the city of Mexico were thrown into a ferment of indignation, multitudes assembled in the squares and public walks, and vengeance was denounced against France and its adherents, with all the characteristic fury of a Spanish populace. The *cabildo ayuntamiento*, or city,* immediately presented an address, tending to stimulate the loyalty and zeal of the viceroy and audiencia; they expressed, in strong terms, their adherence to the captive family, their detestation of Bonaparte and his tyranny, and to resist his dominion, by making every sacrifice in opposing him.

* Those municipalities were not unlike the ancient parliaments of France. Their members, called regidores, their president, the corregidor, and the executive officers, the syndics, were chosen from the people; but, by a more recent practice, those offices had been openly sold by the crown, and the purchasers had the power of relinquishing them in favour of any of their own relatives.

The whole kingdom of Mexico was soon in a state of confusion, and scenes were about to open which would deluge the country with blood. The *audiencia* and *consulado*, all consisting of European Spaniards, looking to Spain for protection, and, ultimately, as a retirement, when they had accumulated sufficient wealth, were afraid lest if the French family were firmly established, which they saw no reason to doubt, that the Creoles and all Americans would withdraw the ties which connected them with old Spain.

The *municipality* were in dread of being subjected to France, and deprived of their laws, and, above all, of their religion; of the excellency of which they affected to be themselves, and certainly made the Creoles, Mulattoes, and Indians, deeply impressed.

The *audiencia* and *consulado* urged on the viceroy, with all their influence, the importance of following the fortune of Spain under every circumstance, whilst the *municipality* and *populace* demanded a solemn abjuration of

France and her partizans, and the immediate assembling a junta, composed of the representatives of the different corporations of the kingdom, to assist and maintain the rights of the Spanish Bourbon family.

Amidst this collision of parties, the viceroy hesitated what part decidedly to take, though he gave, when acting without the influence of the *audiencia*, strong indications of adherence to the popular party. Official advices, however, were soon received from Spain, that the whole of the country had spontaneously risen to defend itself; that they had proclaimed the captive Ferdinand king of all the Spanish dominions; and a body at Seville was appointed, as the supreme junta of Spain and the Indies.

The *audiencia* then urged submission to the assembly of Seville, and the *municipality* urged the necessity of assembling a junta.

The viceroy declined acknowledging the authorities both of Seville and Oviedo, where there was also an assembly established.

In this state of affairs, the members of the

audiencia, and the other European Spaniards, principally traders, secretly organized a body of about 250 men, surrounded the palace in the middle of the night, seized the viceroy Iturrigary, his wife and children, conveyed him under an escort to the inquisition, and by day-break issued proclamations to quiet the populace, declaring him accused of heresy.

The body who had deposed the viceroy conveyed him to Vera Cruz, embarked him on-board a ship, and sent him a prisoner to Cadiz. The *audiencia* having thus disposed of the viceroy, assumed the sovereign authority, and placed at their head Garibay, an imbecile officer of more than 80 years of age, and a creature of their own. His authority, however, was brief, as the junta of Seville sent orders for the archbishop to succeed him: a man, bitter in his resentment against France, and a great favourite with the Creole and Indian race. The populace, though inactive, were not altogether silent spectators of these changes, for considerable alarm and suspicions were entertained in

the cities of Guanajuato, Guadalajara, and Dolores, which were zealously kept alive by the municipalities.

No sooner had intelligence arrived at Mexico that the central junta was dispersed, and that the French had possession of all Spain, except Cadiz, than serious indications of insurrection were manifested ; but, when it was announced that a regency, installed by the fugitive junta, had deposed the archbishop and appointed general Venegas in his stead, who was considered in Mexico as little better than a traitor, an immediate and spontaneous explosion followed. When Venegas placed his foot on the Mexican shore, he found the natives arrayed in hostility to his person and measures. The disposition to revolt had now spread itself over the whole kingdom, and a plan for a general insurrection was laid, to take place on the 1st Nov. 1810; but some unlooked-for events caused a premature explosion in the city of Dolores, in the middle of the preceding September.

The corregidor of that city, Don Manuel

Dominguez, a creole, was suddenly arrested in the middle of the night by the *audiencia*, and his colleagues becoming alarmed lest they should share the same fate, resolved instantly to light the flame of rebellion. The leader and prime instigator of this revolt was Hidalgo, rector of Dolores, a man possessing great natural talents and a degree of activity very uncommon in that country; having delivered an inflammatory harangue to rouse the natives, he soon collected an army of more than 40,000 men.

Three officers of the royal army, who had been fellow-collegians with Hidalgo, *Allende*, *Aldama*, and *Abasolo*, seduced the native regiments to which they belonged, and joined the insurgents.

Hidalgo was declared general in chief, Allende and Aldama lieutenant-generals. Their standard was an image of the Virgin Mary, with the motto, "Life to Religion, life to our most holy Mother of Guadalupe, life to Ferdinand and the Seventh, life to America, death to the wicked Government."

A regiment of infantry from Telaya, and two

squadrons of cavalry of the regiment DE LA REYNA, joined Hidalgo, who then led his forces against the city of Guanaxuato, the inhabitants of which place favoured the cause of the insurgents.

The commander of the regular forces was killed in the first attack, and the rest of his soldiers joined the cause of Hidalgo, who entered the city in triumph, where he found silver in coin and bars to the amount of more than 5,000,000 dollars. This important conquest was achieved within 14 days after the revolt, by a numerous but ill-armed and worse-disciplined body of men; for, excepting the soldiers who had joined them, they were without any military appearance. Some few had fowling-pieces, some few swords, many were armed only with knives at the end of sticks, and some with bows and arrows.

Hidalgo, in possession of Guanaxuato, assumed a kind of government, nominated a military staff, cast cannon, established a mint, and directed the working of the silver mines.

He received a deputation from the inhabitants of the city of Valladolid, which place he entered with considerable pomp and splendour.

From this place he determined to proceed to the metropolis of the kingdom ; on his march he was opposed by a small regular army under Truxillo, which, after a sanguinary contest, he defeated.

In the meanwhile, Venegas had taken measures to annoy the insurgents at the point of the insurrection, but left the capital unprotected, except by the defeated Truxillo.

After his conquest, Hidalgo advanced, and appeared before the city with 70,000 men.

The Viceroy, however, discovered considerable firmness, though he took the precaution to place the treasure and stores in such a position as to insure their secure transport to Vera Cruz.

Relying more upon the thunder of the church than on his military powers, the inquisition and the archbishop were prevailed upon to pronounce sentence of excommunication against the military priest ; he was accused of adhering to the

heresy of Luther, and of denying the veracity of the Bible. Though this had no effect upon the forces of the insurgents, yet, on the inhabitants of the city, who were previously disposed to rise and join the insurgents, it had a powerful effect, and produced a resistance which saved it from capture.

Hidalgo's troops, flushed with the late victory, sat down before the capital; but Hidalgo did not attempt to take it by storm, expecting to have it surrendered to him by negotiation.

Information was now received, that Cadena and Calleja had defeated some insurgent bands, and united their forces to relieve the metropolis. Hidalgo and his associates dreading the fate of Guanaxuato, withdrew from before the city of Mexico, and retreated to the former city, to secure the treasures in that place. The insurgents had hastily constructed two batteries, to defend the only assailable part of the town, which was, otherwise, well protected by nature.

Calleja, however, pursued him, stormed the batteries, and entered the city, which was

delivered over to the vengeance of the enraged soldiers, who exercised the most inhuman cruelties on all they met, without distinction of sex or age. Hidalgo and his army escaped from this carnage, and retreated to San Luis Potosi ; whilst Calleja, with the utmost deliberation, executed the most sanguinary vengeance on the inhabitants who had acquiesced in the rebellion.

Gaudalaxara, one of the most populous cities of the viceroyalty, about 150 leagues north-west from the capital, had now raised the standard of revolt, towards which place Hidalgo directed his march, strengthened by numerous bands that joined him on his route. He was there received with open arms by the inhabitants, his stores were replenished, his troops recruited and refreshed, and some degree of discipline introduced.

Calleja gave but little respite to the insurgents ; he attacked them with a handful of men, succeeded in carrying all the batteries and defeating the enemy, who abandoned their stores, with 90 pieces of cannon. Hidalgo retired

to Zacatecas, a city 125 leagues west-north-west of the capital, in good order, where he made a short stay, cast some new cannon, coined some money, with the head of Ferdinand, and filled up his ranks, which the former battle had thinned.

From thence he removed his head-quarters to San Luis Potosi, where one Valleria had collected an army of fresh insurgents. Guerillas were also equipped, which kept the viceroy in a perpetual state of alarm.

The provinces in the north having shewn a disposition to revolt, Hidalgo removed his head-quarters to Santillo, in order to open a communication with Monterey, and thence to Louisiana, from which place he hoped to obtain stores and officers.

The countries of New Estremadura, New Leon, and New Santander, were in a state of insurrection. Hidalgo, and the officers of his staff, thought they might pass through with a small force, to organize and not to conquer it. On the frontiers of these provinces a few veteran

companies were posted; these were privately concentrated, without the knowledge of Hidalgo, who, with his staff, artillery, and baggage, under a very weak escort, advanced to St. Antonio de Bejar, the capital of Texas. A force of 500 men had been sent forward from the Spanish army, and had passed Santillo, where Hidalgo's army was quartered, without being noticed.

Ignacio Elizondo, a native of the country, who commanded a party of insurgents, was seduced, with a small body of men, to betray the excommunicated Hidalgo; and by these three bodies, the whole of the staff, with Hidalgo, Allende, Aldama, the commanders, the artillery, and the stores, were surrounded and captured. The officers, upwards of sixty in number, were immediately put to death, and the privates decimated. Notwithstanding this horrid practice of extermination, the insurgent army was not dispirited by the loss of its officers and baggage, for Rayon, (formerly a lawyer) secretary of Hidalgo, assumed the command of the army, which amounted to 40,000 men; avoiding

an engagement he took post at Zacatecas, and opened a negociation for a peace between the two parties, who both claimed the merit of contending for Ferdinand and the Catholic church; but which terminated without any arrangement being effected.

Whilst these horrid scenes were passing with various fortune in the north, the flame of discontent had broken out with equal fury on the coast, bordering on the Pacific Ocean; and a man named *Morelos*, formerly a sergeant of artillery, but then a parish-priest in the neighbourhood of Acapulco, was immediately declared commander-in-chief of an organized army, which became formidable for its discipline and numbers, and celebrated for its success in repelling the Spaniards sent to attack it. The viceroy sent general Fuentes to subdue Morelos, who offered him battle at *Tixtla*, and obtained a complete victory. The royal army was dispersed, leaving their cannon, stores, and even muskets, in the hands of their victors. Morelos thus became master of the south-west of the

kingdom, captured *Acapulco*, and gave orders, which were obeyed, even to Guatemala.

Rayon, who we left at Zacatecas, after many futile attempts at reconciliation, was attacked by general Emperan, who commanded a part of Calleja's army, and who was repulsed with the total loss of his artillery and the dispersion of his men.

Rayon then advanced to Zitaquaro, made it his head-quarters, and established a supreme executive council for Mexico, consisting of himself, the curate Verduco, and the general Liciaga. And, whilst exercising all the power of an arbitrary monarch, he did not neglect the proper means of securing himself in his strong position, but fortified all the assailable points. This, however, did not protect him from Calleja; who, after great difficulty, obtained possession of Zitaquaro, with its powder-mills, cannon, foundry, and some stores. But Rayon retreated in safety to Zultepec. Calleja, when, in possession of Zitaquaro, exceeded, if possible, the ferocity which he had before exhibited.

The defenceless inhabitants were most inhumanly butchered by hundreds, and their property confiscated; and those who had the good fortune to survive were banished for ever. But this last mandate was rendered useless, from every building in the place being levelled with the dust.

Dissentions now began to arise amongst the insurgent chiefs. In close connection with Morelos, who displayed the talents of an able commander, Rayon merged into a civilian, and with his co-directors issued proclamations and decrees.

At Zultepec he coined money, and established a printing press, from whence he issued a gazette, entitled *Ilustrador Nacional*, which was very rudely executed, with wooden types cut for the purpose, by a native Indian, and printed with indigo.

The only military exploit which Rayon performed, beyond the occasional excursions made by his troops to levy contributions, was laying siege to Toluca, which he was obliged to raise, and retire to Tenengo, where he was attacked

by the royalist forces, and compelled to retreat ; in consequence of which, they abandoned Zultepec and wandered through the northern districts, sometimes convening a national convention, and at other times without food to keep together any considerable force.

In the beginning of the year 1812, reinforcements of European troops were sent out by the Cortes, which were joined by a division formed in the island of Cuba. Venegas was superseded in the viceroyship, and Calleja appointed in his stead.

Morelos, during all those arrangements, still in possession of the west part of Mexico, and commanding the coast from Acapulco to Coasta Rica, supplied his deficiency in stores and ammunition as well as he was able, and marched his men (who suffered from sickness) in two divisions, one towards Chantila, which he surprised, and the other towards Zalappa. He defeated the Spanish general Saavedra, and obtained possession of the mining city of Tasco, and occupied the whole mining district between

the city of Mexico and Vera Cruz, and thereby cut off all connection with the sea.

He continued to enjoy uninterrupted success for a long period ; the town of Iruca was his principal depôt, which resisted a regular siege, whilst he repulsed the attacking army, surrounded the capital, and reduced it to nearly a state of famine. He also took the city of Orizaba, where he found money, tobacco, and stores to the amount of 12,000,000 of dollars.

The city of Mexico itself was filled with insurgents ready to rise and expel the viceroy, and was only kept in subjection by a rigid police.

Calleja, in these extremities, was obliged to exact from the inhabitants all their plate, in order to furnish himself with the necessary supplies ; watching Morelos, whom he had contrived to separate from Rayon and Sanchez, a curate, acting under Morelos, with five divisions of from 5,000 to 6,000 men each, occupied the whole of the plains of Puebla, the country of Tehuacan and Orizaba, quite up to Zalappa ; he, at length,

besieged him in Quatlan, which he had made his head-quarters, and in which his principal stores were collected. An epidemic fever and a famine, within the town, soon made rapid havoc amongst the besieged. The distress was great, and Morelos attempted to open, by a sally, a communication with a band of insurgents, who surrounded the besieging army; but the military skill and discipline of Calleja's troops caused it to be unsuccessful. It was, therefore, necessary to force a passage to their party. Morelos, in the middle of the night, formed a column, in the van of which were 1,000 fusileers and 256 light-horse, followed by 4,000 lancers, then the carriages and light-artillery, then the slingers and archers, and the rear-guard of infantry, with a regiment of cavalry. With this force he penetrated the lines of Calleja, and, though with a tremendous sacrifice, extricated himself from the circle in which he was supposed to be enclosed. After disembarassing himself from this perilous situation, he filled up his vacant ranks, and, in spite of an obstinate resistance, captured the

town of Chilapa. Here he offered to change his prisoners, which Calleja having refused; he put to death all the royalist officers, and one-tenth of the privates, in his power; hoping, as he expressed himself, that this painful act of retaliation would put a stop to the inhuman practice, which he charged his opponents with having commenced. He then entered Tehuacan. The generals Sanchez and Montezuma; (the latter a descendant of the ancient kings of Mexico, but a priest of the large township of Puebla, and distinguished by his virtues and talents) successfully attacked a division of the royalist army, in St. Augustine de Paemar, and succeeded in cutting off the whole; putting to death those few who surrendered, so that not a single individual was left alive.

The viceroy, though he had gained an accession of men, and considerable supplies in stores, was reduced to merely defensive operations, and could not hinder the insurgents from possessing themselves of any of those places in which they

could collect treasure or stores, or destroy the king's tobacco, which, from the cessation of mining, became the principal source of the royal revenue.

After burning the tobacco of the three preceding harvests, which was stored at Orizaba, valued at 10,000,000 of dollars, Morelos proceeded to Oaxaca, the cochineal district. He attacked, and, after a sharp contest, captured that city, whereby he acquired a considerable quantity of its peculiar production, as well as other riches.

The regular force, under the immediate command of Morelos, amounted to 18,000 men; 10,000 of whom were regimented and clothed in uniform, and armed wholly with muskets, which, at different periods, had been taken from the royalist army.

In the latter end of 1813, Morelos made an attack on the city of Valladolid, in which he was repulsed, and obliged to raise the siege, and retreat towards Puran: he was followed by the

royalist army, under the command of Llanos, defeated, and his second in command, Matamoros, with 700 men, taken prisoners.

Matamoros had, a few days before, taken 500 prisoners, and sent them for safety to Acapulco; these Morelos proposed to exchange for the prisoners taken at Puran, but Llanos rejected the proposal and put the whole to death; upon which, Morelos ordered the 500 prisoners at Acapulco to be massacred, which was immediately executed. Such was the horrid barbarity with which this furious and extended contest was carried on.

This defeat of Morelos gave a superiority to the royalist cause, and fresh reinforcements having arrived, they were enabled to begin offensive operations, when the release of Ferdinand, and his return to his capital, was announced in Mexico.

The leaders of the revolt, calling themselves the national legislature, which had been driven from Zultepec, consisted only of Rayon, Liceaga, and Cos. These men had exercised a species

of government over the various bands, and whilst striving to conciliate their doctrine of the sovereignty of the people with that allegiance they still professed to Ferdinand, the news of his release reached them.

Calleja had been promoted to the government at Cadiz, on account of the severities he had practised, and the zeal he had displayed upon the restoration of Ferdinand was continued in command. A conciliatory proclamation having at the same time reached Mexico, it produced a temporary pause, and Calleja offered pardon to the insurgents, upon which they placed no confidence, and, as appears by his own intercepted correspondence, none was due.

The congress was busily employed in framing a *constitution*, in which Morelos took but a small share, being too much occupied in the peculiar business of the military, to give a tone to the political disputes of the congress.

THE NEW CONSTITUTION

Which was promulgated in October, 1814, renounced allegiance to Ferdinand, and Mexico was declared an independent state. Privateers were fitted out and cruised in the Gulf of Mexico, and the Carribean sea. Emissaries were also sent to the United States to procure arms, ammunition, and officers. They there succeeded in engaging general Humbert (who had formerly landed in Ireland) to join the Mexican army; they landed with some arms and ammunition, and proceeded in safety to a small fortress on the road between Vera Cruz and Zalappa; wheré, according to a preconcerted plan, Morelos was to have joined them; but the latter having been intercepted in his route, which he had undertaken with a small escort, was attacked by a body of royalists, his escort defeated, and himself made prisoner. Having thus fallen into the hands of the viceroy, he could expect no favour; he was accused before the inquisition of heresy, but that tribunal refused

to condemn him, or rather hesitated so long, that Calleja ordered him to military execution ; yet such was the veneration with which he was held by all the inhabitants of the city of Mexico, that the government feared his execution there would produce some convulsion, and therefore sent him to some obscure village, at six leagues distance, where he was shot in the back, to indicate that he was a traitor.

With the death of this extraordinary man every rational prospect of success to the insurgents was at an end. The democratic assembly convened under the constitution met at Tehuacan, and spent its time in debates about the limits to be prescribed to the executive power, whilst they neglected to strengthen the armies, or to provide them with ammunition. After some time spent in personalities, a prototype of Cromwell, or of Bonaparte, appeared in the person of Don Miguel Teran ; he had been a partizan soldier, but at length became commander of the guards, the best disciplined corps in the service of the republic. This man, in December 1815,

about one month after the death of Morelos, surrounded the hall of the assembly with his guards, entered it with a detachment, expelled the members, and associating with himself two other persons, Alas and Cumplido, assumed the supreme power, and abolished the constitution. The irregular despotism, generated in democracy, was unequal to contend with the more consolidated despotism exercised by Calleja. Teran had hopes of assistance from the United States. Joseph Bonaparte, who had arrived there, was destitute of money, or unwilling to risk it in another royal speculation, and though he amused the insurgents with some hopes of assistance, and they flattered him with some prospect of being again a king, it terminated with the disappointment of the expectations of all the parties.

Calleja was strengthened by fresh troops, while the insurgents in numerous bands were scattered over the country, which they laid waste, but retreated as the royalists advanced.

He thus describes them: " These bands are

not sufficiently powerful to defeat the regular troops, to take towns, or to intercept the convoys; yet we have not strength enough to destroy them, but they are frequently defeated, often harassed, and always severely punished if they fall into our power."

During the whole time that Calleja ruled in Mexico, the predatory bands continued to commit depredations; a species of warfare more afflictive than any operations carried on in regular contests. The country became sick of the calamities it suffered, and the voice of conciliation was more wanted than reinforcement of troops. Milder councils at length prevailed in the cabinet of Madrid, and the execution of them was entrusted to the best hands in which they could be placed. Admiral Apodaca is too well known in the first circles in this country to require any eulogium; and as he went to Mexico the herald of peace, he succeeded in lessening the irritation that prevailed, and reconciling the most respectable of the chiefs to his mild administration. Rayon, the most

considerable, accepted the terms that were offered; and he and his whole army laid down their arms, and took the oath of allegiance to Ferdinand.

The terms on which the conciliation was effected have not transpired; but as Rayon, during five years, contended with vigour, even after severe reverses, against the royal troops; as his whole conduct, during the continuance of the contest, was marked by the most determined resolution, we may fairly conclude, either that the terms proposed were advantageous to his party, or that the expectation of success was so small that further hope could not be entertained.

The expedition of Mina, who was equipped by some speculators in Europe for the conquest of Mexico, need scarcely be noticed.

He was little acquainted with the dispositions of the inhabitants, and less with the nature of the country, and the paucity of its resources. After effecting a landing to the north of Panuco, he penetrated into the country, where

■

he was surrounded by the royalist troops, taken prisoner with most of his followers, and at length received his death from the hands of the executioner.

From the execution of Mina, the tranquillity of Mexico was gradually returning, though occasionally disturbed by small assemblages of rioters rather than insurgents. They were dispersed, though not without the loss of some lives in the field, and of others on the scaffold.

Early in the year 1821 another formidable insurrection broke out in Mexico.

Different chiefs took the field, in different parts of that extensive region, against the Spanish authorities, and many skirmishes ensued, which terminated sometimes in favour of one and at others in favour of the other party. At this time Apodaca, the viceroy, sent colonel Iturbide, of the regiment of Valladolid, with a full force, to quell the disturbances in Acapulco, but who, on his arrival there, together with the whole of his troops, joined the independents. Although the insurgent chiefs did not appear to acknow-

ledge any one of them as superior to the other, yet Iturbide gradually acquired the principal authority amongst them. The Spaniards made a vigorous resistance; but their cause was injured by their own dissensions. Apodaca, the viceroy, was deposed by the soldiery, and Novella was, by the same authority, declared his successor. Some time afterwards General O'Donoju, who had been appointed to the viceroyalty by the Spanish cortes, arrived in the province; and, towards the end of August, without having had communication with Apodaca or Novella, or any of the leading men of Mexico, concluded, at Cordova, a treaty with Iturbide, who now assumed the title of "First chief of the imperial army," and in that treaty recognized the independence of Mexico. O'Donoju accompanied Iturbide's army to the city of Mexico, which, after some resistance, was surrendered by Novella, on condition that the Spanish troops should be embarked for Europe.

On the 27th September, Iturbide, the leader

of the army of the three gaurantees, and general O'Donoju, became masters of the city.

Iturbide presented himself at the arch, where a deputation of the ayuntamiento received him with the ceremonial of the civic key, which his excellency returned with the embrace of union and cordiality. On the following day the *provisional junta* of the government was installed with the greatest splendour and solemnity, when they took the oath, which was couched in the following terms :—

“ Will you, senors, swear, by God and the Holy
“ Evangelists, to keep, and cause to be kept, the
“ treaties concluded on the 24th August, in the
“ Villa de Cordova, by the excellent senor, first
“ chief of the tri-gaurantee army, as representa-
“ tive of the Mexican empire, and the excellent
“ senor Don Juan O'Donoju, as captain-general
“ and superior political chief for his Catholic
“ majesty. Will you also swear to discharge
“ the duty of members of the junta of the govern-
“ ment and regency of the empire.”

Rejoicings took place next day, on the *installation* of the *regency* of the *empire*, named by the *provisional junta*, until the cortes should assemble and fill the throne in conformity with the *treaty of Cordova*, which had been sworn to by the different corporations, and consequently by the public voice of the nation, and which had recognized the merit of the persons who composed the supreme junta of the government and regency of the Mexican empire.

On the same day Iturbide was named generalissimo by sea and land of the empire of Mexico, and under him the regency, composed of five members, was appointed. The establishment of the government was followed by the nomination of the different ministers and authorities; and the oath they were required to take simply pledged them to the stipulations of the treaty of Cordova. O'Donoju died a few days after he had signed the treaty in the Villa Cordova, not without suspicion of having been poisoned. Towards the end of the year 1821, intelligence arrived that the king and cortes of Spain had

refused to ratify this treaty. On the 19th of May, 1822, the sovereign constituent congress of Mexico took into consideration the circumstance that the cortes of Spain, by a decree inserted in the Madrid Gazette, of the 13th and 14th Feb. last, had declared the treaty of Cordova null and void; one article of which treaty left it open for a prince of the Spanish royal family to assume the imperial authority in Mexico; and, in default thereof, the authority should recur to the sovereign congress to nominate a person as emperor, and to exclude all others from thenceforth. And the congress proceeded to declare, that this act of the cortes made the case thus provided for in the 3d article of the said treaty no longer obligatory on the Mexican nation, and having duly considered all the circumstances, decreed that " Senor Don Augustin de Iturbide is the " person best entitled to that office, upon the " basis of the plan already proclaimed and " accepted by the body of the nation." It was then ordered that the decree should be communicated to all the authorities of the empire.

Iturbide, thus exalted to the imperial dignity by the plurality of votes in the sovereign congress, began to exercise the power with which he was invested, but not without considerable private dislike and opposition, which, from the circumstance of being overawed by the army, the parties dared not publicly to express. Indeed, so great was the resistance, that an army of 6,000 men, commanded by Generals Gaudalope Victoria, Santana, and Guerrero, was on its march against the capital.

Previously to the coronation of Iturbide, further discontent was manifested; some of the deputies of the cortes having withdrawn themselves from that body, and many others of the influential men in Mexico having retired from court in disgust.

On the 21st of June following, the coronation of Iturbide was performed with the utmost pomp and magnificence, and the dormant spirit of dissent from his elevation soon began to shew itself after this event. Gaudalope Victoria, with 10,000 men, had already proclaimed

the republic, in opposition to the emperor ; and soldiers, officers, and chiefs, deserted to him from all quarters. On the 26th August, the executive government caused to be arrested 45 or 50 individuals, amongst whom were 15 members of the congress, then sitting in the city of Mexico. Some days after which the congress presented a memorial to the emperor, praying that their fellow-members in captivity should be forthwith brought to trial. The reply to this document was by no means a favourable one, throwing reflections on the whole body, criminating their views and measures, and threatening, that, if they were not governed by better principles, he would be under the hard necessity of disregarding the laws which should emanate from that body. Addresses from various public bodies of Mexico followed, complaining, in loud terms, to the emperor, of the oppression experienced by the people and his government, and upbraiding him with having violated his oaths, made in the most solemn manner in the presence of the congress of the em-

pire, and expressed their determination to restore the country to liberty, or perish in the attempt.

In the month of October the emperor dissolved the congress, and substituted a junta, selected by him from its members, who were his immediate creatures.

Santa Ana, the governor of Vera Cruz, in November, was summoned, by Iturbide, to Zalapa, and another appointed in his place ; this roused Santa Ana, who drew out his regiment and proclaimed the republic, denouncing the emperor as a tyrant and usurper.

Manifestoes were published on both sides, and a battle ensued, in which the imperialists were defeated ; but, on the 20th of December, Santa Ana was surprised and defeated with great loss ; and, on the 22d, returned to Vera Cruz with the remnant of his troops. He, however, collected a new force, attacked Iturbide's troops, gained a complete victory, and took 500 prisoners.

He then addressed a letter to Iturbide, de-

manding his abdication of the throne, and abandoning a command which was alike repugnant to the imprescriptible rights of the nation and the origin of its misfortunes. Soon after these occurrences the following generals were found in arms in defence of the republic—Victoria, Santa Ana, and Vergas, in the province of Vera Cruz ; Garrero and Bravo, in Puebla ; the general Jural in San Luis Potosi ; and in Campechi, Oaxaca and Guatemala, the republic had been proclaimed.

A proclamation was soon after issued by the congress, declaring that Augustin Iturbide, convinced of the incompatibility of his political life with the safety and happiness of the American state, and influenced by remorse for his impotent attack on national liberty, had implored the generosity of that magnanimous nation, that it would pardon his enormous errors, and allow him, in a remote country, to tranquillize the remorse of his conscience, and strive to forget the woes he had inflicted on humanity.

The liberating army acknowledged the old congress, which had been unjustly dissolved, and pledged fidelity to its decrees.

After Iturbide had surrendered himself and abdicated the throne, he submitted to the army these three propositions.

1st. That the army should not decide his fate ; but the congress.

2d. That he should be escorted by general Bravo, and permitted to go to Tulancingo, whence he would make arrangements to embark with his family and effects to Jamaica.

3d. That all the troops with him should become a part of the liberating army.

To which propositions he received the following reply.

1st. It cannot be permitted that you should go to Tulancingo, nor to Jamaica.

2d. In case that you should be permitted to go any where, you shall be escorted by general Bravo and his troops.

3d. As to the troops referred to, their disposal will be considered.

On the 14th of March, 1823, the Mexican congress passed a decree, that the coronation of Don Augustin Iturbide was an act of violence and not of right; that the hereditary succession and titles, emanating from that coronation, were annulled, and all the acts of the government passed between the 19th of May and the 29th of last March were pronounced illegal, or, at most, subject to the revisal of the congress; that the executive supreme power should hasten the departure of Don Augustin Iturbide from the territory of the nation, and that it should be accomplished at one of the ports of the Gulf of Mexico, in a neutral vessel, procured at the expense of the state, for conveying him, with his family, to the place he might choose; and also that the sum of 25,000 dollars, payable in Mexico, should be annually assigned to him during his life, on the condition that he established his residence in any part of Italy; and after his death, his family should receive 8,000 dollars, under the rules established for the pensions from the military fund; and that Don Augustin

Iturbide should hold the compellation of excellency.

The congress, at the same time, decreed that the term *imperial* should be abolished in all the public establishments and offices, and the term *national* substituted. And that the coat of arms and national flag should be the Mexican eagle, standing on the left foot, upon a nopal, or chochineal fig-tree, which may grow from a rock among the waters of the lake, and with the right foot grasping a snake, and holding it in a posture for tearing it to pieces with the beak; and that this blazon should be bordered with two branches, the one of laurel and the other of oak, according to the design adopted by the first defenders of independence. In respect to the national flag, that it should remain as theretofore, with the only exception of placing the eagle without a crown, which should also be the case in the shield.

The following is the project of the present "Adopted Constitution of the Mexican Nation," and the principles upon which it is founded:—

1. The establishment of national boundaries, which are to comprehend New Spain, Yucatan, and the internal provinces.

2. Declaration of liberty and independence.

3. Ditto of the Roman Apostolic religion, and prohibition of all others.

4. That the sovereignty resides in the nation.

5. The nation adopts a Republican representative popular federative form of government.

6. The integral parts are independent states in what relates to their interior.

7. The states, 15 in number, are stated.

8. The Congress has the right to modify the last article by augmenting or diminishing their number.

9. Division of power into legislative, executive, and judicial, which shall never be united in one person.

10. Legislative power is placed in the chamber of deputies and a senate; the deputies named by the citizens in the manner prescribed by the constitution.

11. The basis of distributing the representa-

tives in the chamber of deputies shall be the population; each state shall nominate two senators.

12. General powers of Congress—to sustain the national independence and security, and to provide for whatever regards foreign relations; to preserve internal tranquillity, and to promote the general prosperity; to maintain the independence of the states among themselves; to preserve the Federal Union, regulate their limits, and settle differences between two or more states; to support the equal distribution of duties and taxes among the states; to admit new states; to regulate annually the general expenses of the nation; to establish the contributions to the general expenses, their proportions and revenues; the accounts of them from the executive power; to regulate external and internal commerce; contract debts; to acknowledge the public debt, and fix the means for consolidating it; declare war; appoint the armed force by land and sea, fix the quota of the respective states and organization thereof; orga-

mize the national militia, reserving to the states the nomination of the officers ; approve treaties ; concede to the executive extraordinary powers ; make laws necessary to carry into effect the constitution.

13. The constitution will fix the other attributes and prerogatives of the Congress.

14. The present Congress will convoke a senate, composed of two senators, named by each state, to revise and sanction the constitution.

15. The general constitution will place, for a limited time, the executive power in a President.

16. They will also appoint a Vice-President,

17. His attributes are—To put in execution the general laws ; to name and displace secretaries of the cabinet ; guard the public funds ; name officers of the government and interior ; to declare war when authorized by a decree of the general Congress ; this not being in session, in such manner as the constitution shall designate ; dispose of the land and sea-forces, and the

acting militia; dispose of the local militia within the territory; appoint officers of the army, navy, and active militia; give discharges and furloughs to the military, regulating their pensions according to the laws; name, with the approbation of the senate, diplomatic agents and consuls; direct foreign negotiations, and execute treaties previously approved of by Congress; watch over the administration of justice, see executed the laws and constitution, with the right of objecting to the laws within ten days, suspending their execution until the decision of Congress; to issue decrees for the better fulfilling of the constitution and laws, with the right of suspending officers and depriving them of half their pay for three months; with the advice of the secretaries, to pardon delinquents or commute their punishments.

18. Orders and decrees must be sealed by the secretary of the department to whom the subject belongs.

19. Those charged with the executive power

may be impeached for mal-administration during the term of office and one year after.

20. The same of the secretaries of the cabinet.

21. These accusations can only be made by the chamber of deputies, and before the senate.

22. Judicial powers reside in a supreme court, and in tribunals established in each state.

23. They are prohibited to judge by *ex post facto* laws, or special commissions; but the tribunals established by the former Congress, for the trial of malefactors and robbers, shall not be considered special commissions.

PARTICULAR GOVERNMENT OF THE STATES.

24. The same divisions of powers as in the general government.

25. The legislative powers shall reside in a Congress for each state, elected by the people—elected and removed as the constitutions of each state shall provide.

26. A law which they must at once enact

shall designate the manner of forming these legislatures where they are not already established.

27. The executive powers must be confided for a limited time.

28. The judicial power shall be exercised by such tribunals as the respective constitutions shall prescribe.

29. The state constitutions cannot oppose the general constitution.

30. They may organize provisionally their internal government.

31. No state criminal shall receive an asylum in any other state.

32. No state shall impose taxes on imports or exports, unless where necessary to carry into effect their inspection laws.

33. Neither shall they establish any duty on tonnage, nor keep troops or ships of war in time of peace, or treat with any other state or foreign power, nor engage in any war unless in case of actual invasion or imminent danger.

34. The nation will protect civil liberty, property, and equality, according to law.

35. The federal government acknowledges the debts of the nation already contracted. The constitution general guarantees to each state a republican form of government. Each state shall be obliged to support the federal union.

36. Manner of amending the constitution.

37. The execution of this instrument is referred to the supreme executive power."

With the exception of 250 soldiers shut up in a fortified rock, opposite to Vera Cruz, there is not now a Spanish soldier in Mexico; while, by a recent decree of congress, all the old Spaniards are ordered out of the country; and, since the deposition of Iturbide, there have been no internal commotions of any kind; if the refusal of some towns, in one of the provinces, to send deputies to the general congress be excepted; but even that difference has now been satisfactorily arranged.

RECAPITULATION.

There is not any history in the world which presents such a horrid picture of bloody and exterminating warfare, as that practised during the revolutionary struggle in Mexico: and what will appear extraordinary is, that these unprecedented cruelties and barbarities were not commenced, as might have been expected, by the uneducated and oppressed Indians, in whom such conduct could have been tolerated, but by the implacable and ferocious European Spaniards, who, had they dared to practice them in their own country, would have raised the whole of Europe up in arms to chastise them for such a savage breach of the laws of war. Manifest as were the causes which led to the disorganization of things, springing as they did from a system of oppression and unnatural restrictions on commerce and mutual intercourse, we may look forward, with some degree of confidence, to the acts of a government practically conversant with the sources of her former misery, and determined

to cherish her resources for the benefit of her population. Every member of her family may now expect to attain a just share in the administration of her laws, and a due protection by them. Native Americans will no longer be excluded from those offices of government to which their industrious talent or aspiring genius may lead them.

Agriculturists will not be forbidden to rear and reap the fruits of a generous climate and prolific soil ; and the bowels of the earth will be made to yield their massive stores, and reward the miners' toil. Injudicious, impolitic, and ridiculous restrictions no longer exist to check the spirit of enterprize, and the mines of mercury and of iron may be made to produce those staple commodities of the nation. The monopolies heretofore existing are abolished, upon the principle, that all government monopolies are a cramp to the energies of a people, in as much, therefore, as those have been destroyed so will the nation be benefitted. The monopolies of mercury and tobacco produced a large revenue to the Spanish crown, but the consump-

tion of those articles was very limited, from the high prices that the monopoly created, and produced much the same effect as high duties would have done, amounting very nearly to prohibition.

It was also the narrow policy of Spain to prohibit all trade but through the European continent, and to confine, as much as possible, the agriculture and manufactures of the country to the mere wants of the people; whereas, if she had encouraged agriculture, and the arts and manufactures, and created a great surplus produce, the revenues derived from the export and import duties would have quintupled the amount of all the monopolies in possession of the crown.

It would be useless to argue upon the impolicy of such measures, because they are now so generally admitted to be injurious to commerce, even by the most rigid advocates of the Bourbon dynasty. The present government of the country, sensible of these erroneous principles, has, as the first step to laying open her trade, and improving her manufactures, given every facility to improvements in working the mines, the prin-

principal source of her revenue, and by reducing the duties on the ore has promoted speculation, which must ultimately increase her own resources; besides which, there is not any country in the world so capable of producing the rarest and most valuable articles of merchandize, when proper encouragement and stimulus is given to industry, which, under the old regime, was made a system of oppression. The mines, as affording more than half the bullion sent into circulation throughout the world, will be cherished by the present Mexican legislature, consisting of deputies sent from each of the provinces, and an executive, with a president at their head; a federal government, nearly analogous to that of the United States. It is obviously for the best interest of the Mexican government, of the Mexican nation, and of the individuals to whom the mines belong, to afford every encouragement and assistance, and to preserve good faith with the different mining companies who are embarking their capital to assist Mexico in her difficulties, as well to

benefit themselves as Great Britain; for, in point of fact, the interests of the whole are identified.

The present government has no debt, except the sum of £3,200,000, (a loan contracted for by Mr. Goldschmidt) and the arrears of the military; but it has recently negotiated another loan with Messrs. Barclay, Herring, and Co., for 20 millions of dollars, to pay up all arrears due to the public servants and to individuals; to give an impulse to commerce and to industry; by repairing the public roads, and by forming new ones; to assist public works of all kinds; and to substitute a metallic for a paper currency, which had been issued in consequence of the drains of bullion that occurred during the revolutionary war, when the mines almost universally ceased to be wrought.

If the men of authority and power understand their true interests, and do not aspire to too much individual aggrandizement, so as to preserve that union amongst themselves which is so essential to the establishment of a solid

government, and husband the resources of the nation to provide against unforeseen events, they may set at defiance the whole power of Old Spain, and effectually check any attempt at internal usurpation.

Having been furnished with the sinews of war, by the assistance of British merchants, they will be enabled to restore subordination amongst the troops, and enforce the payment of the just revenue of the state; and, when order and tranquillity shall once again reign, Mexico may expect to see a long period of sunshine and prosperity.

“Nihil tam popolare quam pacem, quam concordiam, quam otium, reperiemus.” Cic.

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